

T H E
DISPENSATORY
Of the Royal College
O F
Physicians, London,

Translated into E'N G L I S H with
R E M A R K S, &c.

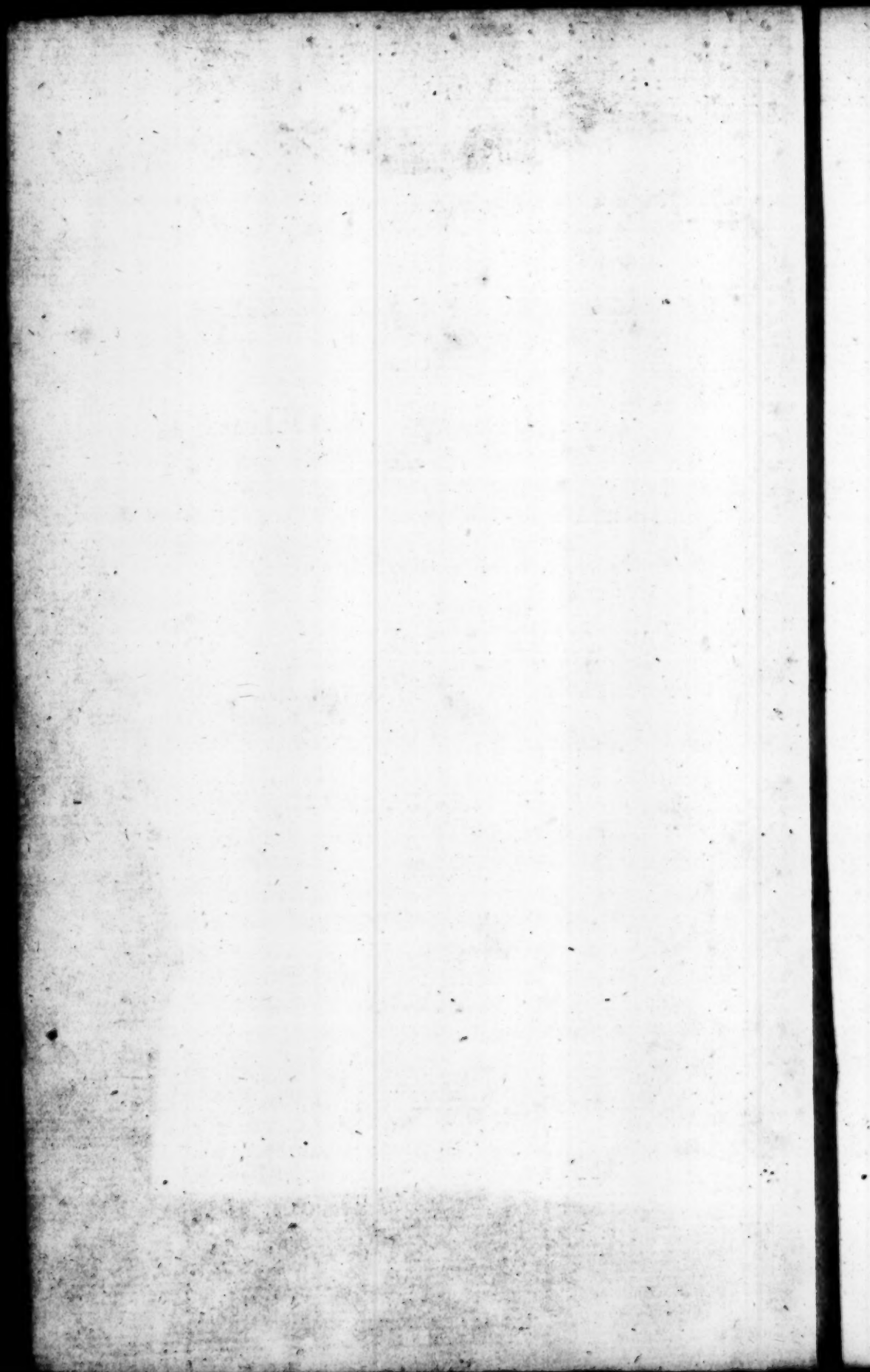
By H. PEMBERTON, M. D.
Professor of Physic in Gresham College,
and F. R. S.

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of the translator.

THE college of physicians having chosen a committee to review and correct their pharmacopœia, and those gentlemen having, in pursuance of that design, drawn up a plan for a new dispensatory accompanied with a narrative of their proceedings therein; as that narrative expatiates more at large, upon what is briefly pointed out in the preface of the college to their present pharmacopœia, and sets forth the grounds of the principal alterations the committee proposed, and the college has received, it is annexed to this translation immediately after that preface, with some explanatory remarks: lesser particulars, there thought unnecessary to be mentioned, are taken notice of under the articles, they respectively

* A

concern:

iv *ADVERTISEMENT.*

concern: and occasionally such observations are added for farther illustrating the methods of operation, as occurred, and the brevity here designed would admit: some articles, especially such, as are now first received into the pharmacopœia, did not appear to require any animadversion. Moreover, though in this reformation of the dispensatory care has been taken not to vary the doses of medicines by the alterations made in them; yet I have here added the like table, as has been computed for the former pharmacopœias, expressing in what proportion purgatives, opiates and mercurials enter the principal of those compositions, wherein they are ingredients.

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PREFACE

P R E F A C E

OF THE

C O L L E G E.

*T*HE president and college have again thought it requisite to review the London pharmacopœia: this the more correct, and concise method of prescribing now in use among the most eminent physicians seemed to render necessary; and the trust reposed in the society by the legislature of superintending the course of practice also required.

It were certainly a disgrace, and just reproach, if pharmacy should any longer abound with these inartificial and irregular mixtures, which the ignorance of the first ages introduced, and the perpetual fear and jealousies of poisons enforced, against which the ancients endlessly busied themselves in the
search

search of antidotes, which for the most part they superstitiously and doatingly derived from oracles, dreams, and astrological fancies: and vainly hoping to frame compositions, that might singly prevail against every species of poison, they amassed together whatever they had imagined to be endued with alexipharmic powers. By this procedure the simplicity of physic was lost, and a wantonness in mixing, enlarging, and accumulating took place; which has continued even to our times. We have here endeavoured, as much as might be, to retrench this excess; though in some things we have submitted to the prevalence of custom, and have left them to the correction of posterity.

It were needless to enumerate all the particular changes here introduced; but we desire it may be known, that it was neither our intention nor endeavour to comprehend the whole extent of pharmacy; though if we are not deceived, we have furnished the shops with

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a suf-

a sufficient number of elegant and simple medicines, that physicians may always have in readiness remedies efficacious, well tried, and as little ungrateful as possible; whereby cures may be performed with speed, safety, and the least molestation: this is most worthy the physician's care, as it is the sum of the patient's wishes.

A
NARRATIVE
OF

The proceedings of the Committee appointed by the College of Physicians to review their Pharmacopœia.

SINCE the committee appointed by the College to review their Pharmacopœia exhibited a specimen of the progress, they had then made, they have received papers upon the subject, both from members of the college, and others (*a*).
But

REMARK.

(*a*) The committee, before they exhibited the plan, to which this narrative was prefixt, had presented to the members of the college, and some other gentlemen likewise, a draught for the reformation of the Pharmacopœia, which contained the first sketch of their design.

A

But as these papers have been few, and consist chiefly of doubts, and proposals for new trials; the committee found it necessary to continue some time longer in the way, they had begun, that they might inquire not only into the particulars suggested to them, but also into all others, which they had reserved for farther examination: and having at length proceeded as far as they apprehend incumbent upon them, they now without more delay refer, what they have done, to the examination and decision of the whole college. When the college shall assemble to take under consideration the plan here proposed, the committee intend to lay before them, intire, the papers, they have received; that whatever they may have passed over, may not be rejected upon their private judgment: in the mean time they take leave to enlarge a little on the motives, by which their conduct has been regulated.

IT is needless to repeat, that the first care of the committee was to expunge the medicines no longer made use of in general
2
practice,

practice, and to insert such, as have come into esteem since the last revisal of the Pharmacopœia; but the principal part of their labour has been to examine the articles, they have retained, or given admision to, both in regard to their pharmaceutic composition, and upon the genuine principles of medicine.

As our Pharmacopœia is compiled of medicines collected from authors of very different ages, to form the more perfect judgment of these compositions it is requisite to take a view of the state and progress of pharmacy from the beginning; since the usual objection made against all attempts to amend things long received is, that we are to presume, their first authors might have reasons for what they did, which, were they searched after and discovered, would be found to be just, however the thing for want of such an examination may be thought exceptionable. But in this inquiry one great error must obviously appear to run through the whole of the ancient system, that is, redundancy

in composition. This, when physic first became an art, could scarce be avoided, while experience was short, and the powers of medicines could not be exactly known; then it was natural to accumulate ingredients of similar virtues, while it was uncertain, which deserved preference. But this practice was attended with two great disadvantages; for without very singular care discordant ingredients, that would obstruct each other's operation, must often be combined together; and the most powerful material must have its dose so diminished, as to render the whole a medicine less efficacious. Had the Peruvian bark, when first recommended to Europe as a febrifuge, been constantly administered in company with a numerous tribe of ingredients, that had been ranked under the same title; if its operation had not been obstructed by any heterogeneous mixture, at least this, the only useful part of the composition, must have been taken in so small a dose, that its real efficacy could never have discovered itself. Therefore succeeding times certainly deserve censure, when, instead of correct-

ing such superfluities by the assistance of longer observation, men rather ran into the affectation of dilating and extending to yet greater lengths these forms already too copious. But what carried this ostentation to the highest excess, was the project of framing antidotes, which being previously administered might defend against any poison whatever, that should afterward be taken into the body. To this scheme is owing the enormous length of the celebrated mithridate and *theriaca*; for such medicines must of course recommend themselves by the number and variety of their ingredients, as they were to contain a proper antidote against every possible species of poison; and more especially as these compositions were also to be farther wrought up into little less than universal remedies against all diseases, to which the human body is subject. The first of these is pretended to be composed from experiments made with all kinds of simple antidotes separately by the famous king, whose name it bears, as *Attalus of Pergamus* had done before him*.

* *Galen. de antidot. L. I. c. 1.*

But as no records are left us of any of these particular experiments, we may reasonably consider this tale as fabulous. And for the additions made to it by *Andromachus*, we are not informed of any pretence upon which they were severally added, except, that by the viper's flesh this medicine was to be rendered more useful against the bite of that animal *. However the *theriaca* gained so high a degree of credit, that even the wise *Marcus Aurelius* was prevailed on to make a daily use of it, to the great prejudice of his health, till his head was so affected, that he dosed in the midst of business, and then omitting the opium in it, was not able to sleep at all †.

While these unmeasurable compositions were in such high repute, it is not to be expected that a due esteem for simplicity could ever prevail. Instead of this, the great emulation among writers, both Greeks and Arabians, consisted for many ages in displaying their dexterity to enlarge more and more these ostentatious superfluities. And when the Arabians first brought the

* *Galen. de antidot. L. I. c. 1.*

† *Ibid.*

ancient arts and sciences into these western parts of Europe, the universal ignorance, that had overspread this quarter of the world, had immersed men in the utmost darkness of superstition, with minds long practised in resigning all trust, not only in their understanding but even in their senses. Under this baseness of spirit it was impossible for men to have any confidence in themselves; any reformation was the farthest from their thoughts; the only effort men of busy fancies could make towards fame, was by commenting and expatiating on the philosophic systems, which had been contrived to give an air of wisdom, to what took rise from the imperfection of knowledge, and had continued through affectation and indolence.

There are however, very just reasons for some degree of composition. Some material may be requisite to give a medicine its most commodious form, whether to procure the due consistence to an external application, or to facilitate the exhibition internally of what shall be ungrateful to the palate: an additional ingredient may by a pleasing taste and flavour be subservient to

reconcile a disgusting medicine, not only to the palate, but the stomach also: the most adequate remedy in many cases may have disagreeable properties, which shall restrain the use of it within too narrow limits; yet some other of a similar kind, though less powerful, may be added to it without offence, and the composition by such augmentation be rendered more efficacious: nay, perhaps, often no simple may be known qualified to answer all the intentions, a disease may require: also some materials by their action on each other will visibly compose a body with properties, which belong not to any of the ingredients separate.

But such obvious and natural motives are very disproportionate to the forementioned extravagancies. Some of the ancient empirics, though declared enemies to the refined speculations of the dogmatists, proceeded so far, as to admit, that accumulating ingredients of similar virtues might be usefully employed to fit the same composition for different constitutions, as one material might more affect some constitutions, and another, others. But this excuse, far as it might be extended, was, it seems,

seems, deemed yet insufficient *; a much more subtle exercise of fancy being required to explain the intricacies of these elaborate compositions. Medicines therefore being first distributed into the four qualities of heating, cooling, drying, and moistening; by the combination of these, and the structure of the substance, in which they adhered, whether consisting of gross or subtle parts, was deduced another head of qualities from consequential effects, they were supposed by this means to have on the body, of inciding, attenuating, incrassating, relaxing, astringing, and the like; by a farther prosecution of this speculation was derived from the same source a third rangement of cephalics, hepatics, stomachics, diuretics, and others; these orders being closed by a fourth head, to comprehend such, whose effects surmounted even the acuteness of this system to explicate: these were said to operate *totâ substantiâ*. The first of these qualities, as well as those, which depended on them, were farther di-

* ——— ὁ λόγος ἔτος ἐπιδείκνυσι καὶ τὴν τῶν ἐμπειρικῶν ἰατρῶν φιλονεικίαν, κ. τ. λ. Galen. de compos. medicam. per gener. L. I. c. I.

vided into four degrees, and each of these into three subdivisions, whereby medicines might be adapted to each case with the nicest subtilty by the rules of arithmetic*. Again, when the composition was thus happily adjusted, it was farther to be inquired, whether the medicine after all might not be suspected of some noxious quality, requiring correction; and this, whether real or imaginary, was by the farther addition of some proper accompaniment to be provided for. It was also to be considered, that a medicine might be serviceable to a remote part, but exposed to be destroyed by the powers of digestion, before it arrived there; then it was to be assisted by such a material, whereby it should be defended, and conducted safe, so as neither to be acted upon, nor act, till it reached the designed part, and then be left to operate without impediment, its guide and protector being itself there opportunely consumed; some medicines were pretended to run too swiftly through the body, others to move on too sluggishly; the first of these

* *Galen. de medicament. facultat. L. V. c. 1, 2. De compos. medicam. per gener. L. I. c. 2.*

required

required a curb, the others a spur: often a director was necessary, that the medicine might not stray from its destined course: every medicine was supposed to have its peculiar station, wherein, left to itself, its operation would be exerted; if it were required to perform its office sooner, it was to be committed to the custody of some other, which might fix it to the region desired; if it were designed to proceed farther, it must have an assistant to open it a passage *. Upon such vague and fanciful principles, as these, the most ridiculous farrago might be vindicated; yet thus for many Ages did men exercise their ingenuity, and raise admiration from their followers, without the least improvement of the art of healing. Even when the Greek originals came into our hands, from which our former teachers had themselves received their knowledge, men had not yet learnt to think for themselves, but their abject submission to authority still continued. Now indeed parties began to be formed, and eager controversies were commenced between the new patrons of the Greeks, and the old admirers of the Ara-

* *Avicen. L. V. init.*

bians;

bians; yet every one was equally to submit to the dictates of the master, he had imposed on himself.

The first persons * usefully employed, while these fantastical doctrines ingrossed the schools, were those, who, by the study of botany chiefly, endeavoured to correct the many errors attending the names of plants and drugs, which had arisen partly from the corruption of copies, but more from the imperfect manner in which the ancient Greek learning was conveyed down to us. The Arabians, from whom we received our first information, though fond of the Grecian literature, seem to have been so incurious, as to have acquiesced for the most part in such translations from that language, as Syrians could furnish, to whom both tongues were foreign. What the Arabs had learnt came through worse translations to us, made often in partnership, one (unskilful, perhaps, in the subject) interpreting, while another expressed, as he could, the sense dictated to him; and this from a language, whose orthography is, beyond all others known, obscure, and subject to ambiguity and error.

* *Leoniceus, Manardus, &c.*

However,

However, the superstitious veneration for antiquity, which had so long been the obstruction to improvements, received at length a successful check by the inquiries into anatomy, where the deficiencies of the ancients appeared visible to the senses. These pursuits, from the time they were pushed forward by *Vesalius*, being followed with great assiduity, gradually habituated men to examine things for themselves, and exposed the folly of that supine adoration of ancient authority, which had before prevailed. And now the minds of men began daily more and more to open, till all opinions, whether speculative or practical, were discussed with freedom. Hereby, when philosophy in particular received new lights, and the researches into nature were pursued in a just manner by experiment and diligent observation, physic shared in the improvement: from this time the practice of it grew gradually less formal and systemical: if the reformation of pharmacy was not equally advanced, it must be supposed owing to this cause, that men more employed themselves in attending to the genuine efficacy and uses of the forms,
their

their forefathers had provided for them, than in examining minutely into their composition, and the amendments, of which they were capable.

THE progress of the present pharmacy from the time of its first introduction by the Arabians has been this, as far as it can be extricated from the obscurities attending the original of it. *Saladinus* of *Ascoli*, an author who writ about the middle of the fifteenth century, while as yet there were no pharmacopœias established by any public authority, inform us, that the books, with which the apothecaries were then generally furnished, were these: a book of *Avicenna*, and another of *Serapion*, which treat on simples; *Simon Januensis de Synonymis*; a treatise of an Arabian author under the name of *Liber Servitoris*, containing the preparations of simples, and the chemical medicines then in use; likewise two *Antidotaria*, one of *Johannes Damascenus* or *Mesue*, and another of *Nicolaus de Salerno* *.

Some

* The age of *Saladine* must be learned from himself. He mentions a fact, which implies *Naples* to have

Some time after, *Nicolaus Præpositus* of *Tours* wrote a general dispensatory, that might supply the place of all these †; in which the compositions are almost intirely taken from *Mesue*, and the forementioned more ancient *Nicolaus*. The *Thesaurus aromatariorum*, writ near the same time, and the *Lumen apothecariorum*, consist also of the like extracts; and in the *Luminare majus* published soon after, which contains a more extensive collection, these two authors generally lead each several head.

have been within his time under the dominion of the Aragonians, who were first possessed of that city in the year 1442. [*Vid. Suppl. Mes. Ed. Junt. fol. 253 H.*]

† This book begins thus. *Quærebat ille Saladinus, solennis doctor; qui et quot sunt libri apothecario necessarii. Et respondens sex dixit esse libros apothecario necessarios, quos ipse in compendio suo ad aromatarios declarat. Nos vero dicamus, quod iste solus noster libellus sufficiens est apothecario, eoque habito, nullo alio indiget.* These words imply a distance from the time of *Saladine*, which creates a difficulty. This author occasionally makes mention of several writers about his own time, and among the rest of *Matthæus de Gradibus*, whom he expressly names as living at the time he himself writes, whereas *Matthæus de Gradibus* is commonly supposed to have died in 1460. But that author's own works clear up this point; for we have *Consilia* of his dated as late as 1497. [*Consil. 9. 31.*]

The

The same *antidotaria* have been made the general basis of the modern pharmacopœias likewise, though we know little more of either author, than their having been the favourites of those barbarous times, wherein they lived.

The age of *Mesue* may with some certainty be determined; for in the *Grabadin*, of which the *Antidotarium* is a part, he quotes *Avicenna* *, who died towards the beginning of the eleventh century †, and is himself cited frequently by *Constantinus Africanus*, who wrote before the end of that century ‡. And this is all that can be ascertained of a writer, to whose autho-

* Under the name of *Aboali* and *Abuhali*. See fol. 214 E F G, 227 G, 249 B. [*Edit. Venet.* 1602.]

† *Abul-Pharaj.* p. 232.

‡ *Lambec. Biblioth. Cæsar. Lib. VI. p. 128.* It has been doubted whether the *Johannes Damascenus* quoted by *Constantinus* is the same with our *Mesue*. But where the citations refer to those parts of *Mesue* which are not now lost, they agree with the original as much as can be expected from the diversities incident to different copies; especially as *Lambecius* above referred to [*Ibid. p. 126.*] shews what we have of *Constantinus* to be a very imperfect and corrupt translation of that author. Compare pag. 10, 12, 32, 34, 37, of *Constantinus* with *Mes.* [*Edit. Venet.* 1602.] fol. 112 G and 162 H, 206 H, 222 C, 225 E, 230 E.

rity such implicit submission has been paid: though even this has hitherto been the subject of dispute; inasomuch that some have confounded him with a much more early writer of the same name, who resided at the court of *Bagdad*; and the most place him an hundred years too late.

Of the other father of the present pharmacy, *Nicolaus*, is known as little. His being styled of *Salerno* should imply his having resided in that school. Of his work the forementioned *Saladine* gives this account: That there were two *antidotaria* under the name of this *Nicolaus*, and distinguished by the appellations of *Nicolaus magnus* and *Nicolaus parvus*; the latter being in most frequent use, and only an epitome of the other, containing but a part of the compositions, and those also reduced to less quantities; whence the prescriptions in this epitome were usually introduced with some such phrase as this *medietas ejus est lb. ii. vel medietas ejus est lb. semis*, and the like, which were generally understood to express in what proportion the receipt in the greater *antidotarium* was contracted. Among the collection of pieces often published

lished together, as a supplement to *Mesue*, one is intitled *antidotarium Nicolai*, wherein are contained the compositions, which the dispensatory writers above-mentioned deliver under the name of *Nicolaus*. This is the lesser *antidotarium*; and of the greater we have also a copy published under the name of *Nicolaus Alexandrinus*, as translated from the Greek by *Nicolaus of Reggio*, the first translator of *Galen*. In this translation the compositions are ranged in the order of the Latin alphabet, as in the other; probably in the original the Greek alphabet was followed; and here, besides a much larger number of articles, than in the other *Nicolaus*, those, which they have in common, are in greater quantities, and, allowance being made for accidental errors, they agree in the proportion expressed in the lesser *Nicolaus* after the manner above related (*a*); where the contractions are made with so much exactness, as to preserve the proportions not only to single grains, but even to odd parts.

REMARK.

(*a*) The dram must be computed at nine in the ounce, for so it is described at the end of *Nicolaus parvus*, the other divisions being the same, as with us.

But

But the copy of this greater *antidotarium* is imperfect; for, as some articles are wanting, so others are evidently supplied from the epitome, being so directly transcribed, as to express the proportion, wherein they are contracted from the original. One of these is a composition called *electarium ducis* and said to be contrived for the use of Roger, duke of *Apulia*, the son of *Robert Guiscard*. If this was ever in the original (and *Saladine* expressly says, the lesser had not any, but what were in the greater also) the author could not be so old as *Mesue*; though the editor would have him to be that *Nicolaus*, who is cited by *Paulus Ægineta*, whereas his frequent mention of myrobalsans, turbith, senna, and other drugs not known so early in *Europe*, plainly shews the absurdity of that opinion*.

Thus

* Besides these two, we have a third *antidotarium* under the name of *Nicolaus myrepsus*, who is also styled *Alexandrinus*. The editor of this was persuaded, that he had first brought to light the original *Nicolaus*. This *antidotarium* is indeed much the largest collection of the three; but cannot be the work, whence the lesser *Nicolaus* abovementioned was contracted; for where the compositions agree, the quantities are usually the same as in that epitome, even when the numbers by the reduction from the

Thus were these two great leaders in the modern pharmacy both of an age scarce exceeded in rudeness by any, since letters have been known. Accordingly, as the compositions of the most ancient authors seldom escaped from each hand, through which they passed, some useless addition, these compilers have generally selected the most corrupted form.

How much ingenious men have been perplexed to account for the irregularity and superfluities of these our masters, may in some measure be judged of by *Bauderon's* comment on the *Aurea Alexandrina*, the first composition of *Nicolaus*. Opium, it seems, is the base, whose powers are heightened by other ingredients, which require also others to correct their ill qualities: besides these, one list of ingredients is to direct the operation to the head, another set to the breast, others to the heart, sto-

greater *antidotarium* are the most broken and minutely divided (a).

REMARK.

(a) This *antidotarium* is compiled in the order of the Greek alphabet; as I have found by consulting a manuscript of the original in the Bodleian library.

mach, spleen, liver, kidneys, and other parts: infomuch, fays the author, that this one medicine in regard to the difeases, he enumerates, may very juſtly be conſidered as a whole apothecary's ſhop, contained in a gally pot *. *Rondeletius* in his remarks on the *Syrupus Hyſſopi Meſuæ* ſeems leſs diſpoſed to admire what he did not underſtand, when he tells us, he long doubted with himſelf, under what head, whether of attenuants or increaſſants, it ought to be ranged, it containing ſo many ſpecies of each kind; and at laſt has recourſe to this frank reaſon for retaining it at all, *erit nobis uſui, cum nondum erimus certi, increaſſarene, an attenuare oporteat* †.

THE firſt pharmacopœia, which was ſet forth by any public authority, was that of *Valerius Cordus* under the ſanction of the

* *Basis locum tenet opium, cujus refrigerans et ſuſcipientis vis auctior ſit hyoſcyamo albo, et cortice mandragoræ; nocumentum eorum corrigitur myrrhâ, euphorbio, caſtoreo, et anacardiis. Virtus eorum ducitur ad cerebrum, caryophyllorum, ſalviæ, pæoniæ, ligni alaës, caſtorei et thuris vehiculo. Ad pulmones et pectus, ſulphuris vivi, thymi, pulegii, et tragacanthi adminiculo. Ad cor, margaritarum ſive perlarum, blattæ, byzantiæ, auri, argenti, offis cordis cervini et eboris ope. Ad ventriculum, maſtiche, &c.*
Bauder. Pharmac. L. I. § 5.

† *Pharmacop. officinal.*

senate of *Norimberg**. This consists almost intirely of collections from the two authors above mentioned, with short notes in relation to such names of the plants and drugs in the compositions, as were of doubtful signification. And the subsequent pharmacopœias paid also the like regard to these writers, however they might be rendered more copious by additions from other authors. Our own in particular, except the medicines taken from chemistry, which by that time had began to gain credit, consisted originally of the like collections from *Mesue* and *Nicolaus*, with some additions, chiefly from *Fernelius*, and by *Sir Theodore Mayerne*, both eminent for their unbounded diffusiveness in composition.

By the free introduction of chemical medicines our pharmacopœia enlarged the plan, to which the former works of this kind had confined themselves.

The rise and progress of this part of pharmacy has been as follows. The Arabians together with the useful branches of knowledge, for which these parts of the world are indebted to them, brought also

* *Ann.* 1542.

among

among us an absurd pretence to a secret art, whereby to make silver and gold by converting other substances into these metals. Though they seem not themselves to have given the first rise to this conceit, but to have received it with the rest of their learning from the Greeks; for it is described, as prevailing in the eastern empire, by authors, who writ prior to the Saracen conquests*; and an Asiatic historian† informs us, that the Arabs before those times, nay for some ages after, pretended not to any kind of natural philosophy, whereas these writers speak of their art, as if the only one worthy of that appellation. These people probably received the very name of the art from the Greeks, among whom we find it called *χημεία*,

* *Aeneas Gazæus* in the fifth century describes the art, as real. His words are ——— *ὡς ἡμῖν οἱ περὶ τὴν ὕλην σοφοὶ ἀργυρον καὶ κασσίτερον παραλαβόντες, καὶ τὸ εἶδος ἀφανίσαντες, ἐπὶ τὸ σεμνότερον μεταβαλόντες, τὴν ὕλην, χρυσὸν κάλλιστον ἐποίησαν.* [*En. Gaz. Theophrast.*] Also *Themistius* in the preceding age speaks of the pursuit, as then in great request, *Νῦν δὲ τῷ, χαλκὸν μὲν εἰς ἀργύριον μεταβαλεῖν, καὶ τῷ, τὸ ἀργύριον εἰς χρυσίον, ἀσμένως ἂν τινα ἐξεύρομεν τέχνην.* [*Orat. ad Valent. περὶ ἡτυχηκότων.*]

† *Abul. Pharaj. Dynast. IX. p. 100, 160.*

χημεία, χυμεία, for it is read differently. The last form has been generally followed by our later writers on the subject; but the most approved editors, and other learned men have preferred the other*; the modern Greeks also write it χημεία. The Arabic name كيميا chimia may be equally derived from either form of the word, δηνάριος being with them دينار dinar, and χύλος κλος chilus.

But though traces of this pretended art of chemistry, are found among the Greeks some ages before the learned times of the Arabians; yet with the Greeks it is but recent†. The art indeed has been feigned to be of so remote antiquity, that the earliest poetic fables alluded to it. *Suidas* ‡, and some other Greek writers, who, if more ancient, are of no better authority, have represented the golden fleece of the Argonauts to be no other than a book wrote on sheep-skins explaining the mystery of the great work. *Borrichius* indulges him-

* *Conring. Hermet. medicin. L. I. c. 3.*

† The name of the art is found in *Julius Firmicus* [*Matth. L. III. c. 15.*] an author not older than the time of the emperor *Constantine*. But higher than this no express mention of the thing either among the Greeks or Latins can be traced.

‡ *In voce Δίρας.*

self in a degree of fondness for these conceits, which is almost incredible. When in the *Iliad* *Mercury* under a disguise tells *Priam* he had six brothers, this must allude to the chemical names of the metals*: and these words of *Homer*

Ἑρμῆς δὲ ψυχὰς Κυλλήνιος ἔξεκαλεῖτο.

Ἄνδρῶν μνηστέρων.

Odyss. ω. ver. 1.

are thus interpreted, *Mercurius procorum, seu metallorum masculorum animas evocat* †. The surprisal of *Mars* and *Venus* by *Vulcan* typifies some secret operation in chemistry ‡, and a like process is so plainly couched under *Homer's* fable of *Mars* being imprisoned by the sons of *Aloeus*, that no one can doubt it without the strongest impeachment of his understanding ||.

This champion of the Hermetic art professes also to believe, that in *Egypt* it was so well understood, as to have furnished that great abundance of gold and silver,

* *Hermet. Ægyptior. et Chemicor. sapient. vindicat. L. I. cap. 3.*

† *Ibid.* § 7.

‡ *Ibid.* § 6.

|| *Ibid.* § 7. *Qui hic naturæ consultus, &c. ei haud opportunius respondebitur, quam Homérico illo Odyss. 1.*

Νήπιος εἰς ᾧ ζεῖν, ἢ τηλόθεν εἰληλυθας.

which

which the Egyptian priests boasted of their country's possessing in the earliest times *: and notwithstanding those priests pretended not to shew any such wealth after the times of the Persian empire, but feigned, that those conquerors had carried it away †; yet this learned man treats also, as worthy of credit, the tale of *Diocletian's* being unable to hold this people in subjection, till by destroying their books he had deprived them of this inexhaustible source of wealth, which prompted and enabled them continually to rebel ‡. But how even so much as a pretence to such a wealth-bestowing art could have subsisted in this country, and the Greeks not sooner have come to the knowledge of it, is an inexplicable paradox, considering how long they were masters of *Egypt*, and with how much assiduity arts and sciences were cultivated at *Alexandria* under the publick encouragement of their princes. However as the very first writers, we have in the subject, affect to speak of it, as of very great antiquity, we cannot be certain, how long

* *Ibid.* c. 11.

† *Diodor. Sicul. L. I.*

‡ *Hermet. Egypt. Sc. sapient. vind. L. I. c. 3. § 18.*

it might have subsisted in some more eastern nation; especially, as we are informed, that in the Persian mysteries of *Mythra* was represented such a relation between the planets, and the several metals, as might probably give rise to that phraseology of naming the metals from the planets, which the earliest, as well as the later chemists, are so particularly fond of †.

But not to pursue this enquiry farther, one thing is certain, that however modern or ridiculous be the original of chemistry, yet by the methods of operation on bodies, which it has introduced, both physic and natural philosophy have been greatly advanced. No Art has furnished better mediums for discovering the composition of bodies; for as heat is a primary agent in all natural operations, and fire one of the great solvents of bodies, no art is more fitted for detecting the internal constitution of things. It has also furnished us with many of the most powerful remedies, as it has put into our hands some of the active principles, by which the changes in nature are wrought, less clog-

† *Origin. contr. Cels. L. VI.*

ged and obstructed from action, than in the usual compound bodies, that come in our way.

Notwithstanding, it was long before chemistry received a place in the schools. Indeed the first patrons of it exposed themselves to the contempt of all sober men by their fondness for the affected mysteries, it pretended to, and at length adopting for their head and master the celebrated *Paracelsus*, whom every true adept to this day admires. This man declared open war upon the schools, disavowing in the most opprobrious terms the whole ancient doctrine, and the philosophic systems, by which these ostentatious superfluities were supported, to which all men had as yet implicitly subscribed. But nothing more rational, that could prevail with men to quit the dictates, they had embraced from their earliest youth, could be expected from one of this man's character, which was perhaps the most absurd, that ever imposed on mankind. From the age of five and twenty his life was spent in drunken debaucheries with the most illiterate people*;

* *Oporin. epist. ad Solenandr. et Wier.*

his whole pretensions in phyfic supported by a daring and inconsiderate use, after the manner of more modern empirics, of some powerful medicines (though, perhaps, much fewer in number than is commonly pretended) in which it must be supposed, he was sometimes fortunate: but probably much oftner unsuccessful, if he scrupled not to own to *Oporinus*, his admirer and follower, that he scarce ever could keep his practice in credit above a year in any one place*. What kind of reformation he aimed at, may be judged of by the following specimen, where in censuring the doctrine then in fashion of appointing directors to guide medicines to the diseased part, he explains the matter thus. *Non enim eo modo medicina provebitur, sed seipsam promovet per virtutem suæ imaginis. Exemplum: Euphragia formam ac imaginem oculorum in se habet. Unde fit, ut assumpta in membrum suum se sistat, et in ipsam formam ejus membri, ita, ut Euphragia integer, ac totus oculus fiat.—Membra universa hominis suam omnino similem formam habent*

* Conring. de Hermetic. medicin. L. II. c. 13. ex *Oporin. epist.*

in rebus crescentibus, in lapidibus, in metallis, in mineralibus, &c. * It is not difficult to determine, how a set of men must at first be received, who could apply themselves in earnest to find a meaning to these drunken ravings †. Upon a less important subject, than where life and health are interested, it were not unpleasant to see men, not without pretensions to knowledge and real merit, busying themselves in unriddling such cant terms as *sutratat* and *aroph*, when the author of them proposes one to extirpate the spleen, and the other, if not the substance, at least the whole operation and office of the kidneys, as parts useless to the purposes of life, and the springs of grievous diseases, from which the body, when these viscera should be destroyed, would be entirely free ‡.

* *Labyrinth. Med. c. 8.*

† That his writings were often dictated in his fits of intoxication appears by what *Erasmus* relates of him from *Oporinus's* mouth; *nunquam nisi bene potum ad mysteria sua explicanda accessisse, et in medio hypocausto columnæ, τετυρωμένον, adeoque numine suo plenum assistentem, manibus capulo ensis comprehenso, eruclare suas imaginationes consuevisse.* And *Oporinus* himself in his epistle to *Solenander* and *Wierus* says, *cum maxime esset ebrius, domum reversus dictare mihi aliquid suæ philosophiæ solebat.*

‡ *Paracels. de virib. memb. c. 8. 10.*

It

It has been the fate of chemistry to be for a long time chiefly cultivated by men so far removed from that sobriety of mind and judgment necessary both in philosophical and medicinal enquiries, that they have rather rivalled each other in extravagancies; he being most admired, who abounded in conceits the farthest removed from good sense. Of this no greater proof can be given, than in *Van Helmont*, who advanced himself to become a dangerous rival in fame even to the great *Paracelsus*, by those dreams, and doting fancies, with which in obscurity, he amused his rambling imagination, that render him, if possible, as much an object of contempt, as the supercilious ignorance of the other merits our scorn and indignation. This man was so childishly credulous, as firmly to believe, that a person continually contracted fresh fits of the gout by sitting only in a chair, which a brother had formerly used, who died of that disease, while to encrease the wonder, the chair would have no such effect upon anyone not of the family. That an inhabitant of *Brussels* within the memory of persons then living had a nose, which was cut off,
renewed

renewed by the famous *Tagliacozzi* with a supplement cut off from a porter, who for hire submitted to that operation, and that in thirteen months after the adventitious nose fell off upon the death of the original owner of the materials of it. These are two only among many other tales of the like kind, he has accumulated together, to insult the ignorance of an antagonist in the powers of nature*. Nor are the rest of the conceptions of this philosopher by fire (as he affects to call himself) in philosophy or medicine any thing more rational. Every compound natural body has a principle, by a term borrowed from *Paracelsus*, styled *Archeüs*, which presided over the formation of it, appointed deputies to officiate under him for each particular part, himself continuing to inspect the whole†. These visionary superintendants are often out of humour, and behave irregularly in their respective posts, thereby producing diseases in animal bodies. For example, a dysentery or erysipelas is the effect of an *Archeüs* falling into rage and committing

* *De magnetic. vulner. curat.* § 21. &c.

† *Archeüs faber.*

disorders,

disorders. For the cure of these diseases the schools ignorantly set about counteracting the visible effects; but those, who are admitted of Nature's privy-council, know the true remedy to lie in taming the passionate sprite. The means for effecting this is no less extraordinary than the scheme, upon which the intention is suggested. A hare being a timorous animal is to be caught by hunting, and a cloth dipt in its blood, while thus under the strongest impression of terror. This cloth with the blood dried upon it being applied to the erysipelas will affect the wrathful *Archeüs* with the passion, under which the hare died, and a few scrapings of it swallowed down will have the same effect in the bowels; and in this fit of low-spiritedness he will grow patient, and the disorders arising from this boisterous behaviour cease*.

Such is the man, that tells us, he was admonished in a dream to apply himself to physic, and was promised the occasional assistance of the angel *Raphael*†: herein

* *Potest. medicam.* § 29. † *Stud. autor.* § 19.

aspiring beyond his predecessor ; for *Paracelsus* goes no higher than magic and the cabalistic art, as the grounds of his pretensions †.

There would be some difficulty in conceiving how men of such distempered brains could possibly ever become the subjects of fame, had we not daily experience, how much the generality of mankind is disposed to admire and hold in veneration, whatever surprises them ; as if the human mind were furnished with faculties to see through ordinary follies, while great absurdities raise an astonishment, which disarms the powers of reason, and inspires a temper under the influence of which, improbability is even an additional motive to belief. And these wild writers find few capable of seeing their follies, that set so small a value upon their time, as to read them, and by that means their merit is little examined into, but taken upon the credit of those, whose cast of mind disposes them to that task.

However, notwithstanding the disgrace, to which these madmen, and their ridi-

† *Labyrinth. medicor. cap. 9.*

culous followers exposed the art; the real effects produced by some chemical medicines brought them gradually into esteem in opposition to the prejudice of the schools, and the fierce decrees *ex cathedra* against them*: for men were now grown wiser, than to make themselves parties in such pedantic disputes, as heretofore, when the regal authority and the power of the law could be ingaged to enforce such learned decisions†. These solemn anathemas against antimony and mercurials, unsupported by such truly formidable aids, had little effect, where they were pronounced; much less did they hinder us from receiving into our pharmacopœia chemical medicines, even of the kind, which had most inflamed this scholastic zeal.

But as the chemical authors, to whom the art of physic is most indebted, have in general preserved too great a veneration for the forementioned visionary writers; so

* By the university of *Paris* against *Quercetan* and *Mayerne*. See *Apolog. pro Hippocrat. &c. advers. Querc.* p. 91. and *Ad famos. Turquet. apolog. respons.* p. 97.

† By the same university against *Ramus* and others. See *Launoy, de variâ Aristot. in acad. Paris. fortun.* c. 13. 17.

they not only contributed nothing by their new systems towards reforming the affected redundancies above complained of, their extracts and distilled waters being as compounded as the powders and electaries of their predecessors; but superadded other errors also, while in labouring by distillations, digestions, and incinerations to separate the pure from the impure (as they affected to speak) they were often guilty of ascribing to the volatile parts separated by distillation, and to the fixt left after incineration, the virtues of the whole compound: this error in relation to the alkaline salts of plants has indeed been of late exploded; but all the pharmacopœias of Europe still abound with numerous distilled waters, even from subjects, which in distillation yield not so much as any virtues whatever.

Thus has every part of pharmacy been over-run with superfluities. And as the first compilers of our pharmacopœia implicitly transcribed from their leaders, so the design of the subsequent revisals seems principally to have been the enlarging the
first

first plan, some few only of the compositions in the original having diminished enough in credit to be omitted; in particular that enormous composition, *antidotus Matthioli*, which contains more than an hundred simples, and moreover, several of the most copious compositions, even the voluminous *theriaca* and mithridate: of this our first compilers were so fond, that besides the composition itself, they prescribe a tincture of it also.

In the last review of our pharmacopœia less regard was paid to the original model, than in any of the former, and the new medicines introduced generally of a more simple kind; yet in this the old ones retained are much too little corrected. But the committee intrusted with the present review resolved upon a more effectual reformation, and to recommend to the college the freeing this book as much, as possible, from whatever remains of former pedantry, too great a regard for preceding times or inattention may have left. And finding the proposals towards that end, which they have already made, generally approved, they resolved still farther to pursue their

first endeavours towards rendering our pharmacopœia suitable to the just and unaffected principles, upon which physic is now practised among us. The committee recommend this work with the greater zeal, that our college may have the honour to be the first medical society in Europe, which shall have duly undertaken this reformation. We have seen a public pharmacopœia very lately set forth, wherein is a composition of no greater importance than a plaster, in which concur more than threescore different ingredients, and a distilled water exceeding twice that number*.

THE committee are very well apprized of the difficulties, which lie in the way of carrying this undertaking to its desired perfection, these compound medicines having been long used, and their effects experienced under their ancient forms; the committee therefore hope, they shall be excused, if, where they had the least ground of diffidence, lest in reducing them they might risk any diminution of their virtues, they

* *Emplastrum Diabotonon*; and *Aqua generalis Pharmacop. Paris.*

have left superfluities through fear of re-trenching injudiciously.

But how far they have succeeded in correcting these, and what other imperfections attend the present pharmacy, will best appear by a distinct review of this Plan (a), which they now offer to the consideration of the college.

HERE, before the particulars are entered upon, two or three points of a general nature must be explained.

THE method of our present pharmacopœia is certainly very exceptionable. However, a dispensatory not being a regular treatise of the art of pharmacy, but only a register of the medicines, the apothecary is to be furnished with; it is not of much importance, how the several heads are ranged: and it being started in the committee, that they might be so disposed, that each medicine should be described, before it is used in any other, which may be

REMARK.

(a) *Viz.* The plan, to which this narrative was prefixt.

some convenience to those, who read over this book in the course of their studies; this proposal was generally agreed to. For executing this design it was requisite to consider medicines under two heads, either as preparations, or as compositions: the greater number indeed participate of the nature of both; but of these some partake more of one of these characters, and some more of the other. The preparations must of course precede, they being often used in the compositions. There is also another division into internal and external medicines, which our pharmacopœia from the beginning has had regard to; and those heads, which are appropriated to external applications, such as the *aquæ medicamentosæ*, and those which follow, are here placed last; but if any medicine is used both internally and externally, it is inserted in its proper class among the internals; and if an external medicine by the form of its composition belonged to any of the preceding classes of internals, it is there placed to avoid a useless repetition of the same class twice over; for though the seven last heads are appropriated to externals only, it was
not

not thought necessary, that the former should contain none but internal medicines.

The order resolved upon by the committee in pursuance of these principles has been excepted against, and other arrangements proposed; but no two agree together: therefore the committee proceed in their first choice, except, where any alterations now made have induced them to vary; as in particular by the new regulations, which they propose in the strong distilled waters, they are inabled to subjoin them immediately to the simple waters, which, consistently with their fundamental scheme, they could not before do.

THE names of many of the medicines also required reformation; not only where time had occasionally brought about alterations, which rendered the usual appellation no longer proper; but where the name had been originally imposed through error, or some fantastical conceit: the corrections also proposed by the committee of ten made some new title necessary. The committee therefore in their former draught exhibited

exhibited some few alterations of this kind; and finding these specimens generally approved, they now resolved to prosecute more fully this design. To prevent inconveniences, that might attend such innovations, the committee in the former draught, sometimes subjoined the old name to the new one, they had introduced. But as this could not with propriety be done, except only where the title, and not the medicine, was changed; a more perfect method has now been taken. The former names disapproved of are not subjoined any where to the new ones, as before; but an alphabetic list drawn out of all the names now rejected, by which any medicines have hitherto been known, with the new appellations here substituted in their room. This index contains all the names of medicines, which have been changed; not only of such, as are in our present pharmacopœia, but of such also, as, being since the publication of that book come into use, are received into this plan. The new name ranged against the old one, is the name now given, either to the same express medicine, or to that, which is substituted,

stituted, as its equivalent. This method removes every inconvenience, that can possibly arise from these changes of names; for the apothecary will here by the old name of any medicine be readily directed to the article intended. The only caution farther requisite on the part of the committee was to use due circumspection, that no composition should pass under the same title, that might have undergone any such alteration as should vary its effects. This might for a time be attended with inconveniences, if any one, before he had taken notice of the alteration, should under the old appellation expect the old form of the medicine.

THERE was another general point of greater consequence, which required regulation; that is, the weights and measures, by which the ingredients in compositions are proportioned. Upon this therefore the committee desire again to explain themselves.

In the first place the terms *libra*, and *uncia* contain an ambiguity; in some substances they denote weights, and in others they

they are understood to express measures. By the term *libra* in measure is meant our wine-pint; though this measure is not so denominated from its containing an exact pound weight of any liquor whatever: and the term *uncia* in measure, according to the present usage, does not denote a twelfth part of the pint, but the sixteenth; though in weight, agreeable to its proper signification, it is used to express the twelfth part of a pound. The uncertainty occasioned by this promiscuous use of these terms will sometimes be very great; in rectified spirit of wine, for instance, an ounce in measure is scarce more than three quarters of an ounce in weight. However this ambiguity is easily avoided by prefixing to these terms P. for *pondo*, when weight is intended, and M. to signify when they stand for measures; this agreeing with the mode of expression constantly used by *Celsus* and *Scribonius Largus*.

This ambiguity in the terms expressing weights and measures is universal, and very ancient; insomuch that *Galen* censures physicians for not distinguishing in their pharmaceutical writings, whether by pounds and
ounces

ounces they meant in liquids, measures or weights †.

But there is an error crept into the practice of our pharmacy, peculiar to ourselves, from the custom in this country of appropriating different species of weights to different commodities. The silversmiths use what is called Troy-weight, by whom the pound is divided into twelve ounces, the ounce into twenty penny-weights, and the penny-weight into twenty-four grains. But in common another species of weight, called Averdupois, is used, in which the pound is greater than the other, and differently divided: the former contains 5760 Troy grains, this about 7000; and this pound is divided into 16 ounces, and each ounce into 16 parts called drams, so that in this species of weight, though it have the greater pound the ounce is about $\frac{1}{11}$ part less than the Troy ounce. Now as in pharmacy it has been the general custom to divide the pound into twelve ounces, and in all

* ——— διὸ γράφειν ἔχρῃν ἐπιμελέστερον ἐν ταῖς
 Φαρμακίταισι βίβλοις τὰς ἰατρὰς ὁποίας τινὰς κελεύουσι
 βάλλεσθαι τὰς ὀγγίαις ἢ τὰς λίτρας τῶν ὑγρῶν Φαρ-
 μάκων, πότερα τὰς μετρικὰς ἢ τὰς σταθμικὰς. *De compos.*
medicament. per gener. L. VI. c. 8.

the editions of our pharmacopœia it is so described; the scale-makers for the use of the apothecaries divide the Troy ounce into drams, scruples, and grains, as directed in our dispensatory, that 8 drams make an ounce, 3 scruples a dram, and 20 grains a scruple, these grains being the same as those in the silversmiths division. But as the druggists and grocers sell by the Averdupois weight, few apothecaries keep weights adjusted to the Troy pound greater than two drams; but for all above use Averdupois weights. By this means in all the compositions of this book, where the ingredients are prescribed, some by pounds, and others in ounces, they are taken in a wrong proportion to each other; and the same happens, when any are directed in lesser denominations than the ounce, as these subdivisions used by the apothecaries are made to a different ounce*. This erroneous practice had even disturbed the regularity of the descriptions in our pharmacopœia: all the old compositions are de-

* When the *emplastrum mercuriale* of the present pharmacopœia is made up by Averdupois weight, it contains a sixth part less of quicksilver, than if it were compounded by Troy weight.

scribed by Troy weight, but many of those more lately received are described in Averdepois weight. This irregularity in our book might have been corrected two ways, either by adjusting the old medicines to the Averdepois, or the new ones to the Troy. The latter method was chosen for these reasons. By this our book is kept conformable to the generality of pharmaceutical writings; and in the other way the apothecaries must have all provided themselves with a new set of drams, scruples, and grains adjusted to the Averdepois ounce, and the doses of all medicines prescribed hereafter by these weights would have wanted $\frac{1}{11}$ part of their present quantity.

BUT now in relation to the several heads, into which this book is divided; in the first place it is endeavoured to give so distinct a description of the weights and measures used in this country, and which of them is intended in this book, that the apothecaries may no longer lie under any mistake in this respect.

THE next head is the list or catalogue of simple medicines, which in the preceding

ceding draught contained only such simples, as entered the compositions of the book; which method was taken to reduce it from that useless length, to which it had been extended. But as the committee then proposed, that any other simples might be added to it, which are occasionally prescribed; they have here inserted such as they apprehend to be most generally used.

This catalogue is now drawn up in two columns. The first contains the plants, and their respective parts, as also all the other drugs, united into one list under their official names in alphabetic order. The second contains, where necessary and free from dispute, a more definite description of each particular; in the plants, chiefly by exhibiting the name, which the species intended bears among the botanists; and where different plants may be promiscuously used, each is described. Thus the *abrotanum* of the first article is described to be either *abrotanum mas angustifolium Caspari Baubini*, or *abrotanum fœmina foliis teretibus* of the same author, being the *santolina foliis teretibus Tournefortii*. The botanical name here chosen for each plant

is

is generally that of *Casparus Baubinus* in his *Pinax*: where that work is deficient, or suspected of error, other writers are referred to: When *Ray* and *Tournefort* in their methods have given to any plants peculiar names, those are also usually here set down.

THE third head is designed for the reception of such preparations, as could not conveniently be reduced under any of the following articles. For instance, the levigating of terrestrious substances is required for most of the powders; but as this operation is also referred to in some of the preceding articles, and the head of powders was intended to consist intirely of compositions, it must have an earlier place in the book, and therefore can stand nowhere, but here. Again, purified lard and Jewet are used for plasters and unguents, but are themselves neither: also *opium*, and other gums, as *galbanum*, *ammoniacum*, and the like, are indeed inspissated juices, but are rarely called by that name; therefore their purification deserves a place here, rather than under the head of *succi*.

D

Some

Some few set under this head in the former draught properly enough belong to following articles, and are accordingly now transferred thither: *oleum myrrhæ per deliquium* is entirely expunged, as not being in any use.

THE following articles of *conservæ*, *condita*, *succi*, *olea per expressionem* require no explication: unless it be requisite to mention a small alteration in the *succi scorbutici*, which are rendered somewhat more simple by changing the two species of *cochlearia* to that alone, which is the more efficacious.

THE next consists of extracts and prepared refines.

The extract of the *coretæ Peruvianus* was directed to be prepared partly by spirit, and partly by water; which is the usual practice in making it. But this method deserves to be well considered. This medicine is of great importance, being designed for the use of such, whose stomachs prove so tender, as not to be capable of bearing the bark in substance in the quantity requisite. Now all the vinous spirits,
I which

which will ever be used for this process with us, are accompanied with some degree of a bad flavour, the melasses spirit not excepted. This flavour adheres most strongly to the phlegm, and is very offensive to weak stomachs. And when a tincture is made from the bark in any such spirit, and the spirit again evaporated; it is scarce possible, as the phlegm of the spirit evaporates last, but the extract must in some degree be tainted with the ill flavour of this phlegm. But water alone will make a complete extract from the bark; the resinous parts, for the sake of which spirit is brought in aid, boil out most plentifully in the first decoction; and after the bark has been boiled in a due number of waters, it has been found by experiment, that what spirit of wine will afterwards extract is quite inconsiderable: nor is the number of boilings, or the quantity of water required for this effect so great, as to leave any just pretence for making the medicine in the course of business otherwise.

The *extractum Rudii* is a medicine of singular importance, and performs what is

expected from it so well, that much caution is required in any attempt towards improving it, though the medicine would be yet more valuable, if it could be rendered something less offensive to the stomach. Perhaps a diminution of the coloquintida might answer that end; but as this medicine is relied on in cases, where the life of the patient depends on its taking effect, the committee could not venture upon such an alteration without full experience, that the certainty of its operating would not be prejudiced thereby. But they apprehend, the medicine may without any danger of this kind be rendered more simple by substituting a proper quantity of aloes for what the agarick, black hellebore, and turbith yield to the extract, which is found by experiment to be but little. Also as the efficacy of the spices consists in their volatile parts, their place will be more judiciously supplied by some species of another character. This medicine, as in the present pharmacopœia, not being the original form ascribed to *Eustachius Rudius*, and by these alterations differing still more, it is here called *extractum*

tractum catharticum. Indeed the composition delivered, as the celebrated secret of *Rudius* *, scarce ought to have borne his name; for, except one ingredient only, the turbith, the same is described by *Andernacus* under the name of *extractum solutorium compositum* †.

Pure refines dissolving ill in the stomach, the refine of jalap is now changed for a more compound extract from that root.

In the last place two extracts not in the former draught, one from the *lignum Campechense*, the other from *guaiacum*, are now added.

In the next head, containing *sales et spiritus salini*, the directions for the preparations are reviewed. Where it was thought of consequence, the circumstances usually observed in practice as the most commodious method of performing the process, are particularly described.

In the salts, which excite effervescence, though the just term of mixing is, till the effervescence ceases, and the salts used in

* *Muller. miracul. et myster. medico-chymic. p. 77.*

† *De medicin. veter. et nov. comment. II. p. 624.*

these processes can scarce be always so perfectly alike, as to admit any other way of assigning with exactness the just proportion between them; yet for the better direction of the operator is set down by what proportion this saturation is for the most part nearly to be effected.

In the *spiritus nitri dulcis* it is necessary to specify the proportion between the two spirits; and though authors direct this preparation with all the kinds of spirit of nitre, yet it is here ordered with *Glauber's* only; for left at large the dose of the medicine will be altogether uncertain. *Hoffman* is very circumstantial in his description of this process; not only directing the spirit of nitre to be poured into the other, but also, that this should be done gradually*; whereas this slow mixing is a caution quite unnecessary; the whole quantities may be put together at once; and it is also for the most part indifferent, which liquor is poured into the other, when it can be done without intermission or delay; though it is the usual practice among our chemists to pour the spirit of nitre on the other; which method is here chosen, as it is the

* *Observat. Physico-chymic. L II. obs. 4.*

securest, when the quantities to be mixed are great, or if the operator should be careless; for then no disturbance arises, though the mixture be slowly performed.

The forms of distilling the acid spirits from nitre and sea salt by the means of bole, or other the like earths, though usually described in pharmacopœias, are now omitted, these spirits not being subservient to any process of this book.

In like manner there being in the former draught three salts, *sal polychrestus nitrum vitriolatum*, and *tartarum vitriolatum*, which are very similar in qualities, it was thought expedient to omit the first, that form not being much prescribed among us.

The *lapis infernalis* having been laid aside by our most skilful surgeons, and our *causticum commune fortius* used in its room, the first is here omitted.

There is on the other hand added a spirit from *sal ammoniac* with spirit of wine without any aromatics; those in the *spiritus volatilis oleosus* of the former draught being also here altered.

Our chemists in practice find a difficulty in preparing with their common *aqua fortis*, what is usually called red precipitate, but is

here named *mercurius corrosivus ruber*: in-
somuch, that some few, who make it with
us, employ a compound spirit, such as was
described in our former draught; but the
success of the process may be very well se-
cured by distilling the *aqua fortis* first from a
small quantity of salt; and for this purpose
such a preparation is here inserted under the
title of *aqua fortis composita*.

The process for soap after Mr. *Geoffroy's*
manner * (a) is likewise now changed,
though his requires the least apparatus, and
would be most easily performed by the
apothecary: for soap having been made after
his manner with the leys of our London
soap-boilers, and compared with some pre-
pared the more common way, both of the
soft and hard kind, from the same ma-
terials, the oil in each being of the finest
sort; his kept worse than the others; while
they remained smooth to the taste, his was
grown very rancid: the oil and leys seem

* *Memoires de l' acad. royale de sciences, ann. 1739.*

REMARK.

(a) This was received into the former
draught.

not

not in this to come to so perfect a union, as they ought. The design of inserting a preparation of soap here is, that we may be furnished with this medicine composed of purer materials than the soaps in common use. If oil olive is chosen with proper care, this soap will be evidently much more grateful than the most celebrated of any of the present kinds. But we have directed the use of oil of almonds.

The names of one or two articles in this head are for the sake of propriety changed. The salt, in the former draught called *sal Sennerti*, is now named *sal diureticus*. The term oil of vitriol has been established by such constant use, that it might appear affectation in a private author to attempt the changing it; but the college is not under the same restraint. Therefore the committee having resolved upon a general correction of the impropriety in names, have called this liquor, what it really is, *spiritus vitrioli*, but with the additional epithet *fortis*, to distinguish it from the weaker acid obtained from the same salt, usually called spirit of vitriol, to which they add the title of *tenuis*. This term

term of *oleum vitrioli* being now reformed, it was requisite also to change the name of the acid spirit obtained from sulphur into *spiritus sulphuris*, which had usually, in conformity to the other, the name of oil also given it. The preparation introduced in the former draught under the name of *spiritus asæ fætidaæ volatilis* being now more concisely called *spiritus volatilis fætidus*; that before stiled *spiritus volatilis oleosus*, is now, in opposition to the other, named *spiritus volatilis aromaticus*.

THE two following articles, *olea chemica*, and *resinosa et sulphurea*, require but little illustration. *Hepar sulphuris* is omitted, being only useful for the *syrupus sulphuris*, now also expunged. The two balsams of sulphur, the *anisatum* and *tartarizatum*, are also passed by; the first being usually adulterated by adding oil of aniseeds to the simple balsam, and the other being of little consequence.

Here *lac sulphuris*, which is a powder, is now more properly called *sulphur præcipitatum*, and *Van Helmont's* phantastical term of *gas*, invented by him to denominate

nate some of his imaginary conceptions *, is avoided by giving to the impregnation of water with the fume of sulphur the more simple appellation of *aqua sulphurata*.

In the next article intituled *metallica* it has been thought necessary to insert some method of purifying quicksilver, which is too often adulterated. Revivifying it from cinnabar is an operose method, and it is imagined, that simple distilling it, and washing it well afterwards, may suffice.

There is also added, which is usually called *sulphur antimonii auratum*, but here *præcipitatum*. But whereas in this process the precipitation is by chemical writers directed with distilled vinegar, of which it consumes a very large quantity: our practical chemists have introduced the use of the stronger acid of sea salt: and this compendium is here complied with, both preparations of the medicine having been compared by repeated trials, wherein no difference in any sensible effects could be discovered.

* See V. Helmont. *Gas aquæ*.

Our chemists generally neglecting to wash the *crocus metallorum*, they are put to great difficulty in preparing emetic tartar, and the medicine at last is rendered very precarious. To obviate this error, as much as possible, here is added the washing of the *crocus* in a separate article.

Emetic tartar having been long made after this imperfect manner, the committee do not think they have sufficient authority from experience to approve of the modern parsimony in preparing *crocus metallorum* with a less quantity of nitre than is ordinarily directed by authors; they have therefore retained the ancient form. But in the former draught they subjoined a *crocus metallorum* with half the quantity of nitre under the name of *crocus metallorum mitior*, this having been recommended to them by one of their members, as an antimonial of mild operation, when given in substance, and of eminent effects in many cases. The committee have no reason to determine otherwise of it; but some trials reported to them, where the operation of this and the other *crocus* were compared, have induced them to leave this preparation
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tion to be farther examined. In the mean time they shall here give a particular description of the process recommended to them. When antimony is mixed with half its weight of nitre, and thrown into a crucible red hot, it deflagrates, and if the fire be raised high enough, the mixture melts, and *scoriæ* separate, as in the other *crocus*; but if the heat be not so strong, it does not melt, nor is this separation made. The gentleman, who proposed this medicine to the committee, prepares it with this lesser degree of fire.

Some few other antimonials also are now omitted, together with the magistery of bismuth, as preparations of little consequence: the *cerussa antimonii*, and *bezoar minerale* differ no otherwise from the more common diaphoretic antimony, than by varying the form of reducing the reguline part of antimony to a calx.

The committee have been surpris'd by a charge of an undue neglect of method in the process of corrosive sublimate, because they direct some sublimate to be used in mixing the materials. Though certainly, as it is not the design of this book
to

to describe all the possible ways of performing each operation, but the most usual and commodious; whatever fault is here committed against method, is not to be charged upon this description, but upon the makers of the preparation; and as this is the most convenient means for mixing the materials, the committee cannot advise the college to insist upon its being done otherwise, because this may be deemed immethodical. Some means is requisite to take off the adhesion of the parts of the quicksilver to one another, and facilitate its distribution among the other ingredients. As a small quantity of sublimate will readily perform this office, and is of the same kind with the preparation itself: it is here the most commodious of any material fit for this purpose, and lays the operator under no difficulty: since sublimate is always to be procured, wherever the rest of the materials for the process can be purchased.

In this article the names of many of the preparations are changed.

It has been proposed to the committee to change the name of *mercurius præcipitatus per se* to *mercurius calcinatus*, which they

they cannot but approve. *Mercurius præcipitatus ruber* is with equal impropriety stiled a precipitate. This they have named *mercurius corrosivus ruber*, and for noting more expressly the distinction between this and *mercurius corrosivus sublimatus*, they have given this sublimate the additional name of *corrosivus albus*. The name *calomelas* they have now omitted, and under the name of *mercurius dulcis sublimatus* have directed the sublimation to be six times performed, which has been understood to be denoted under the name of calomel. The appellation *arcanum corallinum* may also very fitly be changed for some other less affected, suppose *mercurius corallinus*; though the term *arcanum* does not mean, even in the mouth of *Paracelsus*, as might be thought, a secret only known to some enlightened adept, but implies no more than a medicine, that produces its effects by some hidden property, of the kind with those, which in the language of the schools were said to operate *totâ substantiâ* *. *Turpet hunc*

* *Paracelsus*, where he expresses himself most distinctly, explains the meaning of this term thus. *Arcanorum et medicinæ ea differentia est, quod arcana in natura seu essentia*

pethum minerale is a phantastical title of a medicine, which may with propriety be called *mercurius emeticus flavus*. Among the antimonials *crocus metallorum* were more fitly stiled *crocus antimonii*, *oleum antimonii* more properly *causticum antimoniale*, and *antimonium diaphoreticum*, till its medical qualities shall be better agreed on, nay more unexceptionably be called *antimonii calx*.

The committee in their former draught substituted another name for *ens veneris*, not only for the sake of propriety, but to remove the occasion of the mistake committed in our present pharmacopœia, which has been followed by others*, of directing the preparation with blue vitriol; whereas it was originally made with a chalybeate vitriol by Mr. Boyle, the author of it, as appears from his account of the colour of the preparation, and the property, he ascribes to it, of turning a tincture of galls to an

sentia operantur, medicina autem in contrariis elementis. — Medicinæ sunt hæc, ubi frigidum calido, multitudo purgatione demenda intelligitur, sic ergo consentur substantiæ arcanorum, quod naturæ sint directæ adversus proprietatem hostis, non secus ac pugil adversus pugilem. Paragran. Tractat. II. p. 203.

† *Pharmacop. Paris. et Edinburg.*

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inky blackness*; though from his not knowing the qualities of the vitriol, he used, he gave it the name we have changed, and ascribes its effects to copper†. Vitriols are of various kinds; our copperas scarce contains any metal but iron, the blue vitriol used by the surgeons, abounds in copper, though it is not destitute of iron; in those of *Dantzick* and *Goslar*, both which Mr. *Boyle* recommends for this purpose, iron is the principal metal, though they partake of copper also, but in so small a proportion, that, when the medicine is prepared with either of these two, it does not sensibly differ from that usually made from our copperas: whereas in operating with blue vitriol the appearances are wholly changed. This vitriol does not calcine red (*a*), which Mr. *Boyle* represents to be the

* Experiments and notes about the production of volatility, ch. 5.

† Usefulness of experimental philosophy. P. II. §1. Essay 5. c. 6.

REMARK.

(*a*) With a very strong fire the calx may be melted into a solid, though brittle mass approaching to the deep red colour of copper

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the case in his preparation of the medicine. The salt also in its first sublimation rises not at all yellow, but of a greenish blue; which in subsequent sublimations becomes paler, and is changed by the iron contained in that vitriol into such a hue as the mixture of the first sublimation and *flores martiales* would compose. Therefore when Mr. Boyle proposes the Hungarian vitriol, as the most eligible for this preparation, he either did not mean, what has been generally understood by it, the common blue vitriol, or must never himself have made the preparation with it (a).

THE

per too highly refined; but I have not observed, that by calcining only it would acquire any such colour.

(a) It is not improbable, that as we have in this country constantly given the name of Roman to blue vitriol, by which the writers of other countries intend a green*; so we might call some other kind of vitriol by the name of Hungarian, which foreign authors apply to the blue. And this supposition is further confirmed by Mr. Boyle's representing the Hungarian, as a species so very rare.

* See below the observations of the committee in this narrative on *theriaca*.

THE distilled waters follow next. These in our present Pharmacopœia are very redundant articles, the species enumerated in the two articles of simple and compound waters amounting to above 130. All these, a very few only excepted, having been distilled separately both with water and spirit, the committee found the greatest part intirely insignificant; and retrenched them accordingly. But still they continued very numerous (*a*), in the compound or spirituous waters only exceeding 50. The committee therefore have taken these articles again into consideration, and have made a second examination of these waters with a view to their general use in medicine. Distilled waters may properly be divided into two sorts; such as serve chiefly for vehicles to more efficacious medicines, and such as deserve a place on account of their own medical virtues. The principal care in the first of these is to render them as agreeable as possible. Now our waters have generally been introduced

REMARK.

(*a*) *Viz.* after the reformation, they had made of them in their first draught.

under pretence of some medical intention, and the palate has been little consulted in their composition; and such of these, as are continued in use only for vehicles, are yet uncorrected in what is exceptionable in their taste or flavour: for instance, *aqua pæoniæ composita* was first received under the pompous title of *aqua epileptica*; and though no one at this time expects any such mighty effects from it, yet it is still prescribed as a vehicle, more, perhaps, than any other, though it has nothing farther to recommend it, than its being less loaded with ingredients than most of the rest; for the ingredients themselves, except the spices, are in regard to taste and flavour sufficiently liable to objection. The committee therefore have resolved to propose to the consideration of the college, a new set of waters, without much confining themselves to the present compositions. And, that they might not be suspected of any precipitancy herein, they chose rather to undergo the second labour of distilling separately the ingredients, which they had left in the waters of their former draught, examining each, as well apart, as by compounding them

them variously together. And upon the whole they have come to this resolution, that the ingredients fit to be retained in distilled waters are reducible to these classes; either spices, warm seeds and berries, fragrant herbs, flowers, and fruits, or such as are indued with a pungent taste and flavour. They likewise find, that to render waters pleasant it is above all things necessary to compound very sparingly.

Upon these principles they retain the cinnamon water, and propose a lighter spice water, with nutmeg, which differs not essentially from the present *aqua nephritica*, the *flores spinæ albæ* being of little farther significancy than to provide the water with a name. From the seeds of plants they recommend waters from carui, and the lesser cardamoms singly. They could not find either of these improveable by being compounded with any other. Aniseeds afford a useful water, but of an exceptionable flavour, unless to such, as by frequent use have reconciled themselves to it; and they think it much improved by angelica-seed: they could not find a third ingredient even amongst the most pleasant,

which would not prejudice the composition. The water from juniper-berries also is capable of improvement; for which purpose they have chose both carui-seeds and fennel-seeds, as preferable to either alone. But the water most wanting correction is the *aqua raphani rustici*. This root and the *cochlearia bortenfis* join very well together, giving a similar flavour, though it be not a little disagreeable; nutmeg suppresses this flavour very successfully, without superadding any of its own, being, as it were, lost in the other; to this orange peel no incongruous ingredient to the intention of the medicine, adds a flavour very agreeable. Orange-peel gives a water, which requires no addition to improve it: and as in fevers, and in whatever other cases the stomach and palate are subject to receive quick disgust; cordial waters, especially if to be long continued, ought to be but lightly impregnated with any flavour, however agreeable; the committee have composed their orange-peel water with a small portion only of the peel, to answer this intention, as they apprehend this flavour, so generally acceptable, to be as suitable,

as

as any, for this purpose; and the nutmeg-water is also so lightly impregnated with the flavour of the spice, as to correspond in the same intention; these two will also mix together very agreeably. Scarce any of the waters in use are tolerably adapted for satisfying this so necessary an intention: *aqua pæoniæ composita* is generally chosen, as the least exceptionable, our present Pharmacopœia can furnish. The committee likewise recommend waters from the aromatic herbs, mint, pennyroyal, rosemary, singly, in preference to any composition of them with one another. Here is also inserted a spirit with lavender alone, and the present *spiritus lavendulæ compositus* supplied by a tincture from this spirit compounded with a due proportion of the *spiritus rosmarini*.

In the system of waters, which the committee here propose, no mixture of ingredients is made in any without a distinct reason for each. The compound waters, as they stand in our present Pharmacopœia, are the most faulty in regard to the redundancy and irregularity of the compositions, of any article in the whole book; inasmuch that scarce any of them are free from this

censure. The *aqua absinthii magis composita* is usually prescribed with bitter infusions. Now the committee have carefully laboured in search of a bitter infusion, which might be as agreeable, as possible, and they think with some success; but the confused and disgustful flavour of this water added to it will render all their pains ineffectual. *Aqua absinthii minus composita* has indeed no addition to render its flavour exceptionable farther, than what arises from the wormwood itself. *Aqua angelicæ magis composita* is scarce at present in use, and is little more than a composition of angelica and spices, except the absurd addition of saffron and cardamom-seeds in the trifling quantity of two drams to four gallons of the water, that is, not a quarter of a grain to an ounce. No one ascribes to *aqua epidemia* any qualities, its title would imply; its flavour is that of angelica rendered offensive by numerous additions, for the most part in themselves disagreeable. *Aqua florum chamæmeli composita* is principally composed of warm seeds and herbs prejudiced in their flavour by their multiplicity. *Aqua bryoniæ composita* is intended to accompany a species of medicines, which are disagreeable

able to the palate; and instead of being contrived to alleviate that inconvenience, it is a collection of the same flavours; whereas a small augmentation of dose in the medicines themselves would abundantly compensate any assistance to be expected from this water, and leave room for the use of a more agreeable vehicle (*a*). The best parts of *aqua Stephani* are to be found among the waters, the committee have here (*b*)

REMARK.

(*a*) Since this water is of so little real significance, there is a farther very important reason for rejecting it. This water in our first pharmacopœia stood under the name of *aqua hysterica*, or hysteric water, by which it is still commonly known; and the greatest part of women of condition, who have contracted the vice of dram drinking, have been betrayed into that abominable and pernicious habit by the use of this and the like waters under the notion of medicines: whereas, indeed, however spirituous liquors may give a momentary relief to the languors of hysteric and hypochondriacal persons, none suffer so soon the evil effects attending the constant use of such liquors.

(*b*) *Viz.* in the plan to which this narrative was prefixt.

put

put down, which in this water are hurt by too numerous a composition. The predominant flavour of *aqua theriacalis* is from the rue and angelica; the rest contribute only enough to render the whole more offensive. What qualities it can receive from the numerous ingredients of the imagined all-powerful theriaca, may be estimated by this, that the whole species of that electary employed in half an ounce of the water, its usual dose, amounts not to a single grain: the mithridate, with which our pharmacopœia by the advice of Sir *Theodore Mayerne* has the honour of enriching the composition, being also just of the same importance in it. In short if any composition in our book yet partakes of ancient superstition, it is this. But as some water with the addition of vinegar may be desired, the committee cannot recommend any composition fitter for this purpose than a due proportion of the ingredients of the *aqua alexeteria*, mint, wormwood, and angelica: the *ulmaria*, left in that water in the former draught, they now omit, as its flavour is overpowered by the rest. They find angelica in a due proportion the fittest material

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material to remove a disagreeable flavour, which the vinegar would otherwise give the water ; and for this reason that herb is to be used here in a greater proportion than in the *aqua alexeteria simplex*. In the former draught was added upon the authority of *Hoffman* * a spirit distilled from camphire and salt of tartar, as a spirit, which partook of the qualities of the common *spiritus vinosus camphoratus*, yet would not, like that, turn milky, when mixt with watry liquors. But upon trial this has been found to be a mistake. Some of the camphire rises with this spirit in distillation, though but a small quantity ; whence mixt with a large portion of water it does not sensibly render it turbid ; but in a proper quantity it exhibits the same appearance, as the more common camphorated spirit : nay spirit distilled from camphire with or without the salt of tartar does not seem to differ at all in this respect.

The committee have made little alteration in their simple waters, except substituting a water from orange peel in the room of that, they proposed from lemon peel, as a water that will keep its flavour longer ;

* *Observat. physico-chymic. L. I. obs. 22.*

and

and have added a water from castor, this drug in distillation imparting a great degree of its proper flavour to water, though not at all to spirit. They continue in their resolution to recommend the banishing *aqua cerasorum nigrorum*; for as the water distilled from cherry-stones has been found, when prepared of a certain degree of strength, to have the like pernicious effects on the animals, where it has been tried, as the laurel water itself; they think this water by no means safe to be used in any degree of strength whatever to infants, in whom the principles of life are but just beginning, as it were, to move, insomuch that physicians are not a little circumspect, how they trust that tender age even with distilled spirits. This poisonous quality in black cherry water, when very strongly impregnated by the kernels, was communicated from some physicians of *Worcester*, who made their experiments with a water, distilled to the quantity of a quart only from fourteen pound of cherry-stones. The committee have themselves since repeated the same experiment, and found the effects agreeable to these gentlemen's report.

report. This water, no doubt, in a proper degree of strength may very safely be taken by persons of a fit age, no less than spirits in a moderate quantity, and therefore in judicious hands need not be suspected; but as amongst nurses and others, who have the care of young children, it is at present become the first remedy against the convulsive fits, to which children are so often subject, and continually given to them upon every slight occasion; the committee think, the college ought to shew their disapprobation of this practice in the strongest manner; especially since the symptoms, it would produce, when it should prove hurtful, are such, that it is very possible, it may have often increased, however unsuspected, that disease, it is imagined to cure; and as it is used by physicians only as a vehicle commodious from the agreeableness of its taste, the committee hope, that the alterations, they now propose in the distilled waters, will render it much less necessary. Add hereto, that the distillation is frequently made, in whole, or in part, from bitter almonds, a material, which is at least equally poisonous with the laurel-leaves themselves.

THE infusions and decoctions follow the distilled waters. In these but little alteration has been made.

The committee in their former draught took some steps towards reforming the *decoctum* or *infusum epithymi*, and recommended it to farther consideration ; but having received no advice on that head, they have now omitted it.

Their *infusum amarum simplex* is composed upon this foundation. Most of the ingredients, which usually enter the composition of bitter infusions, being prepared by them separately, amongst all the strong bitters gentian gave the most unexceptionable colour, but it wants the assistance of some ingredient to furnish an acceptable flavour ; scarce any of the bitters accompanied with flavour, such as zedoary, *calamus aromaticus*, and the like, appeared to be truly grateful, except orange peel and cardamom seeds ; galangal, though frequently prescribed, is of all the most nauseous : but cardamom seeds are mucilaginous, and render the liquor cloudy, and orange peel is accompanied with a hot oil,
that

that requires it to be but sparingly used : lemon peel in its outer rind, to which all its flavour is confined, is not a bitter, but supplies the gentian most successfully with what is wanted, insomuch that these two in equal quantity unite into a very agreeable uniform taste ; though the composition by a moderate addition of orange peel becomes yet more perfect.

In the former draught was proposed an infusion of sena under the name of *infusum senæ limoniatum*, to be prepared by the addition of lemon peel to the other there set down ; but this will be improved by changing the crystals of tartar into lemon juice : and this is the most agreeable manner, the committee have been able to contrive, in which to administer sena to such, as are more than ordinarily offended with the disagreeable flavour of that medicine. This method of adding an acid in the infusion, whether of tartar or lemon juice, is contrary to that in our present pharmacopœia, where an alkaline salt is made an ingredient. In theory acids weaken watry tinctures from vegetables, and alkalies rather increase the quantity extracted : but experience

perience has sufficiently shewn, that these infusions, as here directed, do not fail in their intention; and in a medicine very nauseous to many it is of principal consequence to prepare it so, that the lightest and least disgusted parts may be extracted.

On this objection against acids in such infusions some prepare the tincture of roses by making the infusion first with water only, and afterwards add the oil of vitriol; but whatever the acid spirit will hinder the water from extracting, it must precipitate, if it be added afterwards; though in this preparation the oil of vitriol bears so small a proportion to the water, that its effect in this respect will be very little; the method in our present pharmacopœia of dropping the oil of vitriol upon the roses, before the water is put to them, is certainly faulty, as it will fall on a few of the roses only, and those, on which that caustic oil undiluted drops, will be burnt by it, and their texture destroyed.

CONCERNING the mixture which were subjoined, as a kind of appendix, to the preceding article, but are now placed
after

after the tinctures, nothing need be remarked. But the articles of *vina medicata*, and tinctures, which now follow in order, require some little explanation.

In the *vina medicata* the *vinum viperinum* is directed with live vipers (a).

In the *laudanum*, which, for avoiding that fantastical name, is now called *tinctura Thebaica*, the saffron, with which the tincture has been loaded, is a useless ingredient: it can have no other pretensions to a place here, than upon the antiquated and ridiculous conceit of its defending against some imaginary ill effects of the opium. Some spice, that may abate the ill odour of the opium, will not be useless.

There is added *vinum aloeticum alkalinum*, being the *elixir proprietatis* of *Helmont* rendered more simple.

REMARK.

(a) The committee directed this wine with living and intire vipers, the original medicine being proposed with such; but the form of the preceding *pharmacopœia* with dried vipers was preferred by the college, as prepared in less time.

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To this head is likewise added a vinous bitter, warmer in the composition of its ingredients, than the watery infusion; and as genitan and lemon-peel make a bitter of so grateful a flavour, the only care required in this composition was to chuse such an addition, as might not prejudice it; the spice here made use of was selected after the trial of many other materials.

The committee still approve the new form, they have chosen for the *tinctura sacra*. Since the college at the last revision of their pharmacopœia did not scruple to introduce great changes in the ancient form of the *biera picra*, the committee at present made no difficulty of following the example; but examined with full liberty, if it might receive any further improvement. The additional ingredients to the aloës in the form of our present pharmacopœia are five in number, besides the cochineal, whose quantity is very small, and intended for colouring the tincture only. Now in every ounce of the tincture is employed of all these together little more than seven grains, and such a small quantity of materials the committee thought wholly unnecessary to divide

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divide

divide into so many different parts, wherein not a grain and a half will be allotted to each. But that they might not contract these without judgment, they made trial of the aloës, and each ingredient by itself. And none of these alleviating the ill smell, with which the best aloës in common use is for the most part accompanied, they essayed other warm drugs, and among all their trials they found only the clove flavour adapted to cover the aloetic smell; and this did it very successfully. But as the quantity of cloves sufficient for this purpose would not be great enough to communicate the same degree of spicy warmth to the medicine, as the present ingredients; the committee chose *canella alba*, whose flavour is of the same kind, and, though milder, is fully effectual for this, provided the aloës, with which the medicine is prepared, is as good as it ought to be.

IN the tinctures the names of several are changed, chiefly to avoid affected titles; but the tinctures of the black and

white hellebore (*a*) are for different reason now denominated from other names of those plants, that no mistake may arise from the affinity of appellation in medicines of so very dissimilar operation.

Three tinctures are added; one from cinnamon, another from valerian, and the third a bitter. In this, lemon-peel, which has borne so great a share in the preceding preparations of this kind, is passed by: as this tincture is designed for long keeping, less volatile flavours are preferable; and cardamom-seeds are here a very commodious ingredient, as in this spirituous menstruum they are free from the inconvenience, with which they are attended in other liquors, of rendering them untransparent.

The tincture of cantharides is now farther reduced by omitting the gum guaiacum (*b*), as this ingredient must be no less

REMARK.

(*a*) They were entered under these names in the former draught.

(*b*) In the first draught of the committee were omitted the rhubarb and gum lac, with which, as well as the gum guaiacum, the tincture in the former pharmacopœia was charged.

insignificant than what was before rejected, in a medicine limited to so small a dose.

The tincture of snake-root being in our present pharmacopœia directed with *tinctura salis tartari*, the committee in their former draught set it down with rectified spirit; but as the heat of this spirit prevents the medicine from being taken in so large a dose, as it might otherwise be, this is now changed for proof spirit, which the committee had already chosen for most of the other tinctures: proof spirit extracts more from vegetables, than a less watry menstruum.

In regard to the *tinctura salis tartari*, it is true, that spirit of wine digested upon an alkaline salt calcined high, will acquire from thence a hot pungent taste; but the colour may justly be suspected to be owing to accident. If neither the salt nor the spirit have any oily tincture, the spirit will scarce receive any degree of colour, unless by some spark of coal, which may accidentally fall into the crucible, while the salt is calcining. For this reason this tincture is usually prepared in a counterfeit manner by adding some portion of anti-

mony to the salt, whereby it resembles too much the tincture of antimony for both to deserve a place here.

The committee have also changed *Helvetius's* tincture for a similar light tincture of steel, which is prepared with much less apparatus.

They have likewise contracted the *bal-samum traumaticum* of their former draught, and have rendered it in the essential parts more conformable to its original plan *.

The committee have re-examined the pretended usefulness of alkaline salts in the tincture of myrrh; and they are surprized, that authors of great name should so unaccountably assert myrrh to be indissoluble, either in water, or spirit of wine, without the assistance of much art: whereas on the contrary boiled in water it dissolves freely, and while the water is boiling hot, keeps almost intirely suspended; but when the water is cold, about one third only, or less, subsides, much the greater part remaining united with the cold water. This water evaporated leaves a gum dissoluble again in water, but will not give so much as a

* See *Pomet Histoire de drogues*, Tom. II. p. 56.

tincture

tincture to spirit: spirit will take up a great part of what precipitates from the decoction, the rest seeming to be dregs. Nor has the committee found, that macerating the myrrh with salt of tartar will enable spirit to dissolve more of the myrrh than this resinous part now mentioned, and the same quantity may be extracted by spirit from the whole myrrh without any such preparation. A quantity of myrrh, first powdered, being divided into two equal parts, one reserved by itself, and the other macerated with salt of tartar for more than half a year, then both set in the same heat with equal quantities of spirit; each of these tinctures, by evaporating equal portions of them, were found impregnated with the same quantity of refine from the myrrh.

The committee apprehend the chalybeate tinctures to be redundant there being two with sal ammoniac, and another with spirit of sea salt, which differ little more than in degree, as the acid in both these salts is the same. Of these the *tinctura florum martialium* is the weakest, and the tincture with the spirit of salt the strongest. These two are certainly sufficient. There-

fore the other with crude sal ammoniac, which the committee in their former draught through compliance with the present practice, introduced instead of that described in our pharmacopœia from the *lixivium martis* dried, is now rejected; though being the most easily prepared, it is generally given, even when that from the *flores martiales* is prescribed: but this substitution the committee so little approve, that upon reconsidering (had the present variety appeared requisite) they should have restored the tincture from the *lixivium martis* in preference to this with the sal ammoniac crude.

THE tinctures are a copious head. However, though the committee desire to free this book, as much as may be, from superfluities no less in the number than in the structure of the compositions; yet they have rather increased than diminished the articles here. But they apprehend the following head of syrups may very properly be contracted.

Syrups were once considered, as medicines of much greater importance, than they
are

are thought at present. These and distilled waters were for some ages made use of, as the great alteratives; insomuch that the evacuation of any peccant humour was never to be attempted, till by a due course of these it had first been regularly prepared; and afterwards the part affected was to be corroborated by another series of the like medicines. Hence arose that great collection, we find of both in pharmacopœias; and the like errors have been made in each. Multitude of distilled waters were compounded from ingredients unfit to communicate any virtue in that way of preparation; and as two thirds of a syrup consist of mere sugar, only some few materials are capable of producing real effects within the small dose, to which this form limits them. We ought therefore to divide syrups, as before the distilled waters, into two species. Some may properly be considered as medicines; but others are chiefly used for sweetening draughts, and juleps, or the like purposes. These latter kind especially should not be too numerous, though some variety is requisite.

The

The committee have taken a review of both these kinds of syrups. The *syrupus de aceto simplex* being only vinegar sweetened with sugar they think may be omitted; and have changed *syrupus de aceto cum allio* (a) for a syrup of garlick without vinegar, as vinegar may be added occasionally in any case, where it shall be thought expedient. They chuse to retain *syrupus corticum aurantiorum*, and reject the *syrupus corticum limonum*, as the flavour of lemon-peel is too volatile for a medicine designed for long keeping. On the contrary, they propose retaining the syrup with the juice of lemons, and not that with orange-juice, and have likewise contracted the number of the syrups subjoined. *Syrupus chalybeatus* they judge unnecessary, the principal design in syrups being to preserve medicines, and the *vinum chalybeatum* wants not the assistance of sugar for that purpose. However this consideration does not extend to the excluding *syrupus croci*; for this

REMARK.

(a) This is a syrup the committee had inserted in their first draught.

form

form is much more frequently prescribed than the wine, from which it is made. *Syrupus hederæ terrestris*, and *hystericus* or *de artemisiâ*, are neither of them pleasant in taste, nor can they in the dose of a syrup operate as remedies; an infusion of their ingredients, which may be taken in large quantity, is requisite for that purpose. *Syrupus pæoniæ*, and *de quinque radicibus* are of more operose composition, than any virtues belonging to them are equivalent to. *Syrupus papaveris erratici*, and *de rosâ siccis*, after the two other red syrups, *caryophyllorum* and *cydoniorum*, need not be both continued. *Syrupus e rhabarbaro* (a), substituted for those in the present pharmacopœia, being intended only for children, the committee propose to omit; since rhubarb is easily given to young children in powder or infusion, and the taste of it cannot be rendered agreeable to them by any sweetening. Though sulphur is an impor-

REMARK.

(a) This also is a syrup of the first draught.

tant

tant medicine, yet the *syrupus sulphuris* (a) is too nauseous a preparation of it.

By such a regulation, as this, the committee apprehend this head of syrups may be contracted into a commodious length, neither the apothecaries shop incumbered with an unnecessary number, nor the physician want a proper variety to supply every occasion.

There are no great alterations made in any of the syrups retained, except in the *syrupus de althæâ*, which is now reduced to the simple form proposed by *Riverius* *. But one new syrup, which has been recommended to them, is added, as a necessary alternative for *oxymel scilliticum* in subjects where honey gives offence.

The committee have recommended the finest sugar in all syrups. Perhaps their reason for so doing will be most apparent by a short sketch of the several processes, sugar undergoes between its preparation

REMARK.

(a) This also was inserted in the first draught from *Bates's pharmacopœia*.

* *Prax. L. XIV. c. 1.*

from

from the cane, and its last refining. From the cane is expressed a very sweet juice, which, like all other juices of that class, if left to itself, would soon fall into a vinous fermentation. Now in this fermentation the finer part of the oil, which by its conjunction with the acid of the juice produces the taste of sweetness, is converted into spirit, while the coarser parts, both oily and terrestrial, subside in lee. But all these juices, when kept under circumstances, that prevent their fermenting, upon drying are disposed of themselves to granulate into a kind of sugar. Of this we see an example in dried raisins and figs, the saccharine substance, we find upon them, being their juice converted into that form. The like is found upon very rich sugar-canes, when wounded, which seems alone to have been the *sacchar* or *saccharon* of the ancients *. But in the practice of making sugar, the juice, before it ferments, and suffers any separation of parts, is boiled to a certain degree of consistence, which disposes it to concrete into a soft

* *Dioscorid. L. II. c. 104. Galen. de simpl. med. facult. L. VII. Plin histor. nat. L. XII. c. 8.*

grain,

grain, and cast off a large portion of gross oily parts, which are called melasses. Lime is found useful to promote this granulation by being mixt in substance with the juice in boiling, though but in a small quantity. The sugar thus prepared, when brought over hither, is refined in this manner. It is dissolved in lime-water, then clarified with whites of eggs, after that boiled to a due consistence, and put into earthen molds, where it granulates, and again separates a quantity of melasses, which gradually drips from it through a whole left in the bottom of the mold for that purpose. To render this reception more complete, the sugar is spread over with fine clay duly moistened: the sugar gradually imbibes the moisture from the clay, and this moisture expels some remains of those oily parts, which are not in quantity sufficient to pass off by their own weight. This is the first refining, sugar undergoes here. Its second purification is thus performed. The sugar, which has been once refined, is dissolved again in simple water, and the whole process repeated as before, by which another portion of oily parts, though less coarse than

than the former, is also separated. Here the operation requires no use of lime. By this second refining the superfluous oily parts are, as it were, intirely separated; whence it is, that the finest sugar in distillation affords an acid spirit only without any visible oil. The process for sugar-candy differs from the former only in not boiling the liquor so thick, and setting it in a hot stove, where it may remain liquid enough, that the sugar may crystallize in the same manner, as salts do in water. Whoever duly considers these operations, must see, that unfine sugar is little more to be preferred to that, which is thoroughly purified, than wine half fermented is, to that, which is completed. When a syrup is made with sugar imperfectly refined, the sugar and liquor being, as usual, mixt in equal proportions, while the syrup is boiling to its consistence, a scum arises, by which some of the gross parts of the sugar are discharged; but these are no more than what are separated in the refining by the clarification previous to its being set in molds for the melasses to run from it; and if the apothecary, to render this purification by the scum

as complete, as the sugar-baker does, clarifies with whites of eggs, he will deprive the syrup of a considerable share of its medicinal parts. When the finest sugar is used for a syrup, there is no part of it lost in scum, and the operation is much sooner performed, it being only necessary in most cases to dissolve in the liquor with a small heat as much, as is requisite to give the syrup its consistence : if the liquor indeed be strongly impregnated from the ingredients (which is the case of *diacodium*, for instance) then it is necessary to add a less portion of sugar, and reduce the syrup to its consistence by a little boiling.

AFTER the liquid preparations with honey, which properly are connected with the syrups, follow the powders. Here, in the *pulvis e chelis cancrorum compositus*, as the amber contributes nothing to the real effects of the medicine, and the hartshorn is the least efficacious of the absorbent powders, the committee have now omitted them, by forming the composition upon the plan of the original said to be purchased from its inventor, *Gascoign*, by the then bishop of
Wor-

Worcester * (a) : only, as the *lapis bezoar*, being a costly material, is for the most part clandestinely left out of this medicine upon supposition, that physicians do not in every case, where this powder is prescribed, depend in any particular manner upon this express ingredient ; to obviate all pretence for this imposition the committee have here under the title of *pulvis e chelis cancrorum compositus* omitted the *bezoar*, and subjoined another powder containing it by the name of *pulvis bezoardicus* ; under which title the physician may more expressly specify, when he insists on the *bezoar* in the composition. Moreover the *lapis* or *pulvis contrayerva*, being formed upon the same basis with the other by adding to the ingredients of that the *radix contrayerva* instead of *bezoar*, the committee have now suitably reformed this powder also.

In the *species confectionis Fracastorii*, now called *species e scordio, terra Lemnia* being

REMARK.

(a) There is one variation. The simple powders of pearl and coral are here preferred to the magisteries of the original.

Vid. Maxwell de Medicin. magnetic. L. II. c. 5.

G

always

always with us an adulteration is omitted, and its place supplied by augmenting proportionably the bole Armenic, the *semen acetosæ* having no relation to, the present use of the medicine is likewise omitted; also red roses instead of the *saccharum rosatum* are added, and the whole adjusted, that the *opium* in *diascordium* may amount to the even proportion of one grain in three drams.

But as *diascordium* (a) was designed by its author *Fracastorius* for an antipestilential *, a purpose very widely different from its present use, it is reasonable to suspect, that others of its ingredients besides the *semen acetosæ* may be unnecessary: therefore as they are too numerous, and by some of them the composition is rendered very disagreeable, here is inserted a *pulvis e bolo*, both with and without *opium*, compiled of such of the ingredients of this composition, as are apprehended to be principally conducive to the

REMARK.

(a) Now called by the college *electarium scordio*.

* *Fracastor. de contagios. morb. curat. L. III. c. 7.*

intention,

intention, for which it is at present prescribed.

The *pulvis ad epilepsiam infantum*, which the committee had substituted (a) upon Riverius's plan * in the room of that operose composition received into our present pharmacopœia from Bate †, they have upon review rejected, as its use may on all occasions be readily supplied by adding to their present *pulvis e chelis cancrorum compositus* such of the medicines peculiar to the case, the title of this powder refers to, as each physician shall best approve; especially as these here chosen are not, perhaps, the most excellent of the kind.

One powder, the *pulvis comitis Warwicensis*, the committee cannot but recommend to the consideration of the college, though they have not thought fit to attempt any alteration in it themselves. They believe few would now make the calx called diaphoretic antimony an ingredient in a purge, nor can they imagine, what assist-

R E M A R K.

(a) *Viz.* in their first draught.

* *Prax. L. I. c. 8.*

† *Viz. Pulv. epilept. Pharmac. Bat.*

ance so weak a purgative, as chrystals of tartar can give to the operation of scammony: though *Cornacchini*, the publisher of this medicine, proposes notable advantage from some deobstruent quality in the tartar, whereby the containing vessels shall be opened, and the noxious humours prepared for expulsion; and from the preparation of antimony, though it have no sensible operation, he expects some share of the same success without disturbance, as sometimes attends the rougher preparations of that mineral * (a).

But the *pulvis Helvetii* of the former draught (b) the committee have here omitted, till it shall be reconsidered by the college. It was proposed to follow in the *balsamum Locatelli* the example of the phar-

REMARK.

(a) The college have rejected this powder, and substituted another in its room under the name of *pulvis e scammonio compositus*.

(b) This was *Helvetius's* pill beaten to powder.

* *Cornacchin. Method. quâ omnes humani corporis affectiones ab humoribus copiâ, vel qualitate peccantibus generata curantur*, p. 6, 7, 8.

macopœia of *Edinburgh*, and change the saunders there for *sanguis draconis* : but upon examination it was found, that though this resinous substance by being of itself indissoluble in the mouth exhibits not any taste at all, yet when dissolved by the oil in that composition it discovers great heat and pungency ; by which it appears to be a very unfit ingredient in that electary ; and it is also as inconsistent with some of the uses of this powder.

IN reviewing the troches, which here follow next after the powders, the committee have only found one or two redundant. The *trochisci albi* ascribed to *Razi* are more compounded than the original in that author* ; and the committee have restored them to their first conciseness, and omit also the opium in compliance with the present pharmacopœia : they are therefore here called *trochisci e cerussâ* (a). The present
trochisci

* *Ad Manser. L. IX. c. 15.*

REMARK.

(a) These by the college are removed to the powders, as also the two following, and

trochisci e carabe, which are taken from *Mesue*, the committee have also reduced to their original simplicity, as found in *Razi*, changing only the *semen apii* in him for *terra Japonica*, as more suitable to the intention of the medicine*: and this new ingredient they have so adjusted to the rest, that the opium in the composition may retain the same proportion to the whole, as in the troches at present in use: the composition is now called *trochisci e succino*. In the *trochisci e myrrhâ*, *semen cymini* is an offensive ingredient, and not of similar intention with the rest; nor is it certainly known whether it be the drug originally designed: the three herbs also may doubtless with great propriety be reduced to a less number.

In the pills *pilulæ cocciae majores* are not only now omitted, but the ingredients of the *cocciae minores* also reduced to the pro-

entitled *pulvis e cerussâ compositus*, *pulvis e myrrhâ compositus*, and *pulvis e succino compositus*.

* *Ad Mansor. L. IX. c. 77.*

portions,

portions, as they are set down in *Galen**; which hitherto had passed, as delivered in *Nicolaus*, and in the treatise of *Mesue* commonly styled *De appropriatis*†; though that author expressly attributes them to *Galen*, and the form in *Galen* is a more eligible medicine, containing but half the quantity of the coloquintida, whereby it will be less ungrateful to the stomach. They are here named *pilulæ ex colocynthide cum aloë*, the name of *coccia* appearing to be a corruption of the Greek κόκκοι, or κοκκία, which are only general names for pills‡.

The committee having taken notice of the impropriety in calling after *Rufus's* name

* *De composit. medicam. sec. loc. L. I. c. 2.*

† *De ægriitud. capit. sum. 3. c. 6.*

‡ This pill is likewise described by *Paulus Ægineta*, (*L. VII. c. 5.*) in these words, Κολοκυνθίδος ἐντεριώνης με. α. ἀψινθὺς χυλῆ με. α. ἀλόης με. α. σκαμμωνίας με. β. ὕδατι ποιεῖ κοκκία ἐρεβίνθα τὸ μέγεθος only here, probably by an error of the copy, the aloes is in no greater quantity than the coloquintida, whereas in *Galen* it equals the weight of the scammony. *Alexander Trallianus* (*L. I. c. 2.*) has a more compound form of pills upon this basis, which are there called κόκκοι οἱ διὰ κολοκυνθίδος. The *coccia majores*, whose author is *Razi*, are likewise formed upon the same though by additions of no value; and their Arabic name قوقاي is no other than the forementioned general term denoting pills applied to this particular composition.

pills, of which in their present form he was not the author, have since considered, that they are not in any such daily use, as well to justify the name of *pilulæ communes*, which they left them. *Razi* gives the form of the pill with equal parts of saffron and myrrh, which he expressly ascribes to *Rufus* *, and in this form it continued long in modern pharmacopœias, particularly in the first of ours, and the alteration is grounded upon very absurd reasons †. The committee therefore do not apprehend any objection can be made against shewing a dislike to such conceits, by restoring the pill to its first form, wherein it may properly bear the name of its original author. The small alteration that will be occasioned in the proportion of the aloes to the rest, is of no consequence in a medicine of this kind; for in a dose of half a dram the aloes will not be lessened two grains.

Pilulæ gummosæ and *fætidæ* might be rendered more similar in their ingredients, so as not to differ farther in composition

* *Contin. L. XXX. Tract. 13. c. 2.*

† *Viz.* lest the former quantity of saffron should produce no less than the *spasmus cynicus*. *Foubert, Pharmac,*

than

than they do in intention. The latter are in reality nothing more than gums possessed of the same faculties, with those in the former, joined with the ingredients of the *pilulæ ex colocynthide cum aloë*, and therefore, if the mithridate were omitted in the *pilulæ gummosæ* (which may be done without prejudice) the intention of the other will be supplied by a due proportion of these with the purgative pill. The *pilulæ gummosæ* are therefore now so directed; and *pilulæ fœtidæ* happening in the present pharmacopœia (perhaps by a typographical error in the *trochisci albandal*) to be much weaker in the purgative ingredients, than in the former editions of that book, and in the generality of authors, they are here now omitted, leaving it to the physician to compound the *pilulæ gummosæ* with purgative medicines in what manner upon each occasion he shall think fit.

Our pharmacopœia has only one opiate pill, the *pilula e styrace*, now kept in the shops; *pilula e cynoglossò* having been long discontinued in practice. This *pilula e styrace* is transcribed from *Mesue* *; but there

* *De agritud. pector. c. 2.*

are in *Galen* more simple forms of similar intention*: one of which the committee have substituted in the room of ours, so proportioning the ingredients, that the opium may be here the same part of the whole, as it is in that hitherto in use.

This pill, both in its former and present form, being composed of substances, which render it of slow dissolution in the stomach, is on that account best fitted for some purposes, but not for all. The committee therefore thought another pill consisting of materials more freely dissolvable would be a useful addition; with which intention they composed the *pilula saponacea*, which they have now, they think, improved by the change made in the soap, and by an addition, that will render it still more grateful.

They cannot upon the maturest deliberation think the *pilula Mathæi* by any means worthy a place in this book, either in regard to the author, or the composition itself. The author *Starkey* was a boasting quack, pretending to the possession of *Van Helmont's* whimsies, the alkahest, horizontal

* *De compos. medicament. sec. loc. L. VII. c. 2, 3.*

gold, and other the like chimeras. Nor was his behaviour in relation to this pill more sincere, permitting *Mathews* to sell it many years, as an universal medicine*: then professing to have instructed some, who vended it after the death of *Mathews*, in a secret relating to the preparation, whereby its virtues should be tenfold increased†; and afterwards denying the pill to be that universal medicine, which *Mathews*, as long as he lived, had uncontradicted by him put it off for; pretending at last, that the secret consisted in the principles of the operation, but that the materials were to be varied, as different cases required‡. *Mathews* was taught to esteem the soap of tartar, with which his pill was compounded, as a universal corrector of the noxious qualities of all vegetable poisons, and capable of converting them into medicines of uncommon efficacy§. Mr. *George Wilson*, the chemist, seems to have been

* See *Mathews's* Unlearned alchymist.

† Postscript to *G. Kendal's* Appendix to the unlearned alchymist.

‡ *George Starkey's* pill vindicated from the unlearned alchymist, and all other pretenders.

§ See *Mathews's* original receipt published by his widow.

favoured

favoured with a much more powerful corrector*; and received a form for this pill different from any, *Starkey* had taught before†. At present this medicine is so variously compounded, that the physician, when he prescribes it, can rely on nothing more than its being composed of soap of tartar with opium, and such other materials, as each operator shall have been pleased to make up its bulk with; nor were these additional materials in the original, considering the minute dose, in which they must be given of any consideration; or if, perhaps, the hellebore in the composition might promote a stool the day after the medicine is taken, that advantage in cases, which require it, may with greater certainty be obtained, by more obvious means. What can be expected from the mysterious soap of tartar, may easily be judged of by examining duly its composition. Very tedious and pompous processes have been given for the making it, with numerous cautions, which in reality are no better than so many endeavours to prevent success. *Mr. Wilson*

* See his compleat course of chemistry, Part II. ch. 10.

† Ibid. ch. 15.

very rightly informs us, that the operation is facilitated by exposing the salt to contract damp from the air, before the oil is put to it*; and indeed no union can be brought about, till some watry moisture is added, either with design, or accidentally from the air, while the salt and oil are grinding together, which is enjoined to be frequently done. Our common operators are so well apprized of this, that they add without ceremony a proper quantity of warm water, whereby they run the other materials into a union very speedily. We are also told, that the salt will take up three times its own quantity of oil. So much may, perhaps, be expended through the evaporation of this volatile oil during the long time prescribed for the success of the process; but some of this soap being distilled and calcined, was reduced to a simple alkaline salt with the diminution only of one third of its weight, three fourths of which diminution consisted of tasteless water; so that there remains but one twelfth of the whole for the oil, without allowing for the loss, which necessarily attends every

* Course of chemistry observat. on Ch. 10. P. II.

distillation. Now if the soap of tartar in this pill equals thrice the opium, as the process is directed in *Bate's pharmacopœia*; with one grain of opium will be given of salt two grains, and of oil of turpentine not more than a quarter of a grain.

IN regard to the electaries, which now follow the pills, the committee having reduced them all under one head, as they had likewise treated the syrups (both which in the present, and our two preceding pharmacopœias were subdivided into alterative and purgative) the only purgative electaries retained by them (*a*) were *caryocostinum*, *diacasia cum manna*, and *electarium lenitivum*. The two last of these were contracted in the former draught by retrenching in the first a useless decoction, besides some diminution of the other ingredients; and in lessening much more the number of the ingredients in the other, besides freeing it from the absurdity of boiling a few drams of prunes and tamarinds in water to be added afterwards to a large quantity of

REMARK.

(*a*) *Viz.* in their former draught.

the

the pulp of the same fruit in substance. But the committee have now extended their endeavours to the correction of other electaries also.

Caryocostinum being ill contrived in regard to its dose, here is substituted in its stead *electarium e scammonio*, comprehending the same quantity of scammony in a dram and half, as it contained in half an ounce of the other: the name *caryocostinum*, formed by an odd composition from *caryophyllum* and *costus* †, could not be retained.

The number of ingredients in *electarium e baccis lauri* being much too redundant, is now lessened.

Confectio Raleighana is a yet more enormous collection of materials. For reducing this the committee have employed great care. This, we have, being received upon no good authority, the committee had recourse to that transcribed by Mr. Boyle from a book in the possession of the author's son; which being compared with a manuscript receipt still in the family was found to agree in every particular ingredient, excepting only, that in one or two

† *Vid. Bayr. Prax. medic. L. XVIII. c. 1.*

the proportions differed; the committee therefore confined themselves to those originals, wherein the extract is composed of no less than five and twenty particulars, each of which they examined apart, except the *ros solis* only, the flower of which is too small to be gathered in sufficient quantity for the general use of the medicine, and the plant is possessed of hurtful qualities, as is experienced in cattle, that feed where it grows †. This plant indeed is adored by chemical adepts. It is covered with an acrid and clammy juice, that sweats from it, which these visionary gentlemen have imagined to be dew, that the sun through its great affection for this plant refrains from drying off, even when all around it are scorched and burnt up. *Isaac Holland* even tells us, this plant exceeds all other vegetables as much as the sun does the other celestial lights: in proof of which, amongst many marvellous and ridiculous faculties he ascribes to it, he says, if any one with this in his pocket go into the midst of his deadly enemies, he will not only escape any annoyance from them, but receive all

† *Raii hist. plant.* p. 1100.

marks of civility and good will *. In this examination of each ingredient by itself many of the extracts came out so very nauseous, that it was impossible to retain them consistent with any due regard to the taste of the compositions. But some few of equal efficacy with any of the rest being of a tolerable taste and flavour were compounded in different proportions, and when after many trials a composition was approved, the quantity of each material, that would yield the proportion of extract, which entered that composition, was calculated, and from thence the proportions collected, in which the process for the extract is now set down, proper allowance being made to bring them to simple terms; after this the compound extract has been made, and found to answer expectation: but it must be noted, that the committee insert the spices in substance, their chief efficacy consisting in volatile parts, of which no extract from them will retain any share. In regard to the powders of the original the committee apprehend, their place will be

* *In Oper. vegetab. Vid. Penot. 115. curationes experimentaque Paracelsi. &c.*

perfectly supplied by a proper quantity of *pulvis e chelis cancrorum compositus*. It should be observed, that this medicine was contrived near the time, when spirituous extracts were first brought in fashion by the chemists, and were usually compounded with little judgment, being praised without distinction for separating the impure parts of medicines, and reducing their virtues within a small bulk. But all subjects are not equally fit for this operation, the virtues of some consist in such volatile parts, as fly off, and leave their extracts a useless mass; others retain a great share of their flavour; in others again their medical qualities reside in the denser parts, and those do not only retain their virtues in the extracts, but as many of them, as are accompanied with any thing disagreeable in their flavour, are improved by this preparation. To go no farther than the present composition for examples, besides the spices above-mentioned, angelica in its substance is possessed of a very agreeable flavour, whereas the extract not only retains nothing of this, but is of a taste exceeding nauseous. Cardamom seeds retain so great a degree of their

their grateful flavour as to be a very necessary ingredient in the compound. On the contrary zedoary, whose flavour is very exceptionable, yields an extract, which retains a good share of flavour, but much meliorated. Saffron likewise loses nothing agreeable in its extract.

But to proceed to the other electaries, the true *confectio Archigenis*, being the *paulina* of *Aristarchus* in *Galen* †, is so similar to that, we have transcribed from the unknown *Mesue* ‡, that no reason can be given, why the medicine should not be brought back to its first form, and author.

Philonium was in our last draught restored in like manner to its original simplicity; but the opium adjusted, that it might not bear a greater proportion to the whole, than it does in our present pharmacopœia, and the euphorbium was changed for ginger: but the quantity of this ingredient is so very small, that this and the two others, *nardus Indica*, and *pyrethrum*, may more elegantly be reduced to one,

† *Galen. de compos. medicam. sec. loc. L. VII. c. 5.* compared with *Aët. L. VIII. c. 65.*

‡ *De ægritud. pector. et pulmon. c. 5.*

and ginger will be no improper substitute for all three (a). The committee farther consider, that of all the narcotics in use among the ancients, what is obtained from the poppy only is at present in esteem. They therefore think, the *semen hyoscyami* (of which it is not certain that we now use the ancient kind) may advantageously be changed for some other ingredient, that may without impropriety be admitted in the same quantity. *Semen carui* is very agreeable to the intention of the medicine, and will also render it more acceptable to the palate. Our pharmacopœia had copied the most compounded form in *Nicolaus*, with the imaginary improvement of myrrh and castor in the room of *costus*, after the example of the dispensatōry of *Augsburg*. If we examine the particulars of this medicine thus industriously crouded, we shall find in a dose containing one grain of

REMARK.

(a) The college have rendered this composition still more simple by omitting also the saffron, and reducing all the remaining species, except the opium, to equal quantities.

opium,

opium, that the forementioned myrrh and castor amount to no more than the trifling proportion of two fifths of a grain each, others of the ingredients do not rise to so much, nay some only to a quarter of this quantity.

The committee in their last draught made no farther alterations in the ingredients of the mithridate and *theriaca*, than rejecting such, as were not in the original (*a*), except substituting cinnamon for *casia lignea*, which, it is evident from *Galen*, was only used through the scarcity of the other*, and by omitting the *asarum*

* *De antidot. L. I. c. 14. De sanitat. tuend. L. VI. c. 1.*

REMARK.

(*a*) Neither the description in verse of the elder Andromachus, nor the prose explanation of the younger, make any mention of the white pepper afterwards added to the composition of *theriaca*†, and the forming the agaric into troches with ginger is also another innovation; in like manner the *radix iridis* in our description of the mithridate is a supernumerary ingredient, not warranted by the original.

† *Galen. de antidot. L. I. c. 6, 7.*

in the mithridate, which is inserted on a conjectural emendation only of a corrupted passage in the original description; in the *theriaca* they also changed the name of the vitriol, which modern dispensatories have generally substituted under the title of the Roman for the ancient *chalcitis* now not certainly known, in order to obviate a mistake, which the first compilers of our pharmacopœia have handed down to us. Our pharmacopœia in the catalogue of simples has from the beginning described this to be a blue vitriol; whereas the Italian writers are unanimous, that the Roman vitriol is green*; and were it not, it would not answer the purposes of the *chalcitis*, which was certainly a chalybeate. However, though the committee did not take upon them to make any material alterations in those ancient medicines, whose effects are so well known in their present forms; yet they chose to follow *Zwelfer's* proposal† of uniting the ingredients of the *trochisci cypheos* to the mithridate itself,

* *Mercat. Metallothec. Amar. IV. c. 2. Casalpin. De metall. L. I. c. 22, &c.*

† *In animadvers. in pharmac. Augusten.*

as those troches are never used any otherwise; and also to do the same by the troches, which enter the composition of the *theriaca*. The ingredients in the *theriaca* unite into pretty even numbers; in the mithridate it was necessary to neglect in one or two instances a few grains. But this collecting the simple ingredients together discovered the insignificant quantities of some of them; for instance in the mithridate, where the whole species amount to no less than three hundred drams, three ingredients enter in the quantity of half a scruple only, and as inconsiderable a material as the pulp of raisins, comes in under the trifling quantity of a dram and half. These no doubt ought to be neglected. Besides the odd half drams in the turpentine and *juncus odoratus* may be avoided by joining one to the superior, and the other to the subsequent articles; then if the half dram in the *calamus aromaticus* be omitted, which joins it to the articles that immediately follow, the whole quantity of the species will amount exactly to three hundred drams, and one grain of opium will be contained in just half an ounce of

the electary. In like manner in the *theriaca* by reducing the cinnamon, *opobalsamum*, *costus*, *juncus odoratus*, and valerian to even numbers; doubling also the *calamus aromaticus*, as an equivalent in quantity for itself and the unknown *xylobalsamum*, and rejecting the following minute articles, the species will amount to four hundred and fifty drams, and one grain of opium will be contained in seventy-five grains, or one dram and a quarter of the electary.

The *theriaca Londinensis*, being now scarce used otherwise than externally, ought to be placed in the article of *epithemata*. But this being an enormous composition, a more simple cataplasm of similar intention is there proposed in its stead, under the name of *cataplasma e cymino*, formed from those materials in the other, which have been most used in such external applications: the opium is omitted, as not corresponding in intention with the rest.

THE article of *epithemata* has been enlarged by some other additions also. But all the articles relating to external applications

tions have received some variations, which require a little explanation.

AMONG the *aquæ medicamentosæ* the committee find the *aqua aluminosa Fallopii* (a) so little used at present, that they think it not necessary to be continued in the pharmacopœia: they also judge the *aqua ophtbalmica vitriolica*, and the *aqua styptica camphorata* too similar for both to be retained; and they esteem the bole Armenic a useless ingredient in the latter (b). Nor can they allow the lotion fantastically called *lac virginale* to deserve a place in this book. The title of the styptic inserted in the former draught under the name of

REMARK.

(a) This is the *aqua aluminosa* of the late pharmacopœia, to which the committee in their first draught added *Fallopius's* name to distinguish it from the *aqua aluminosa Bateana*.

(b) This *aqua opthalmica* was a composition in the first draught of the committee, and principally differed from the other in being a weaker solution of vitriol. The *aqua styptica* is that retained under the name of the *aqua vitriolica camphorata*.

Sydenham is now changed, he not having been the first publisher of it *, the preparation also itself being somewhat varied by freeing it from unnecessary incumbrances, which he had left in it.

AMONG the plasters the committee have particularly taken into consideration *emplastrum e meliloto*. In their former draught they reduced the rosin in this plaster to the weight of the wax; the proportion in our present pharmacopœia occasioning that undue degree of irritation in blisters dressed with this plaster, which is so generally complained of. But the committee now recommend also a farther improvement by omitting the herb, as of no significancy towards the use of the plaster, and of a very disagreeable scent, a circumstance of primary consequence to be avoided in diseases, where freedom from disturbance, and every means that can contribute to quiet rest, ought by all possible endeavours to be procured: not to mention the mischievous adulterations sometimes practised in this plaster with irritating materials for procuring the

* It was published in a tract, styled *Anchora sauciatorum a Johann. Weber, Brigæ 1677.*

green colour, which is made its marketable characteristic, more compendiously than by the decoction of the herb. As this alteration makes it necessary to give the plaster a new name, it is now intitled *attrabens*, that appellation implying its true office. It might with equal propriety have been named *epispasticum*, had not that term been by long use with us, though faultily, restrained to another form, which should rather have had the name of ἐνδόριον, by which both *Dioscorides* and *Aëtius* express the operation of cantharides*: therefore as *emplastrum ecdorium* might be thought a title too affected, it is styled now *vesicatorium*, by a term used in medicine, which is free from ambiguity. This change in the title of the blistering plaster is the more requisite, as the applications, which the ancients called epispastic, are nearer allied to those, which rubify and inflame the skin, than to such as only excoriate; these two operations being very different.

The committee also think it of importance to reform the *emplastrum cephalicum*, and have removed out of it the common

* *Dioscorid. L. III. c. 70. Aët L. VIII. c. 16.*

pitch,

pitch, whose empyreumatic smell is scarce to be surmounted and covered by any convenient means whatever. This plaster is also contracted in the number of its ingredients; as are some of the others also. To *emplastrum e cymino* additions have been made, partly to render it of a less disagreeable smell, and partly to bring it more perfectly to the consistence commonly desired in a plaster, that it may be kept in the form of a roll, without falling flat by the warmth of the air.

It has been judged most expedient to omit the balsam of *Tolu* in the *emplastrum volatile* (a), lest an application so acrid might adhere too firmly to be removed so soon, as might sometimes be requisite; and as it has not the consistence of a plaster, it is removed to the article of *epithemata*.

In regard to a stomach plaster, the committee apprehend, that no such application can be effectual without some mixture of volatile substances: therefore this preparation ought not to be made in quantities

REMARK.

(a) This was a plaster inserted in the former Draught.

for

for long keeping; and to produce any considerable effects must be frequently renewed: therefore a composition is now inserted for this use, easily made upon occasion, and but moderately adhesive, that it may not offend the skin, and may without difficulty be taken off as often as shall be judged necessary.

THE classes of unguents and liniments have also received some small emendations, but not needful to be particularly specified.

INDEED what alterations may be found in these or any of the preceding articles, besides those which have been particularly mentioned, the committee apprehend, may so easily be judged of, from what has been explained, that they think it unnecessary to enlarge any farther on this correction of their former Draught. And in what has here been written they have had two designs.

Observing the great regard still preserved by the generality of the pharmacopœias of Europe for the ancient forms; and that what little censure has passed upon any of them, has been so much neglected, that the greater part of the modern additions
pur-

pursue the same plan, either by ostentatious redundances in their composition, or some mysterious, though useless intricacies in their preparation: they thought it not useless to make such an enquiry into the original and progress of our pharmacy through its several stages to the present time (a subject but little known) as might set forth the principles, upon which these forms were modelled, and the genuine characters of those, to whose conduct the world has thus long paid such submissive obedience.

They also thought it necessary to enter into a detail of the particulars, they have proposed to reform, that their brethren of the college may with the greater ease examine each, and judge after mature consideration, what to approve, and what to amend; that no imperfection may escape through neglect or oversight, but that the pharmacopœia, when it shall pass the revival of the college, may receive all the improvement it is capable of, from the united endeavours of every individual member, and come forth no less with the approbation, than by the authority of the whole body.

PHARMACOPOEIA
LONDINENSIS,

THE
LONDON
DISPENSATORY.

PONDERA et MENSURÆ,

WEIGHTS and MEASURES.

IN this country two kinds of weight are in use, one in the merchandize of gold and silver, the other for almost all goods besides. The first we call Troy weight, the other Averdupois weight. The pound in these is differently divided, in the first is reckoned twelve ounces only, in the other sixteen. Likewise neither the pounds nor the ounces are of the same weight, the goldsmiths pound is less than the other, but their ounce greater.

In

128 WEIGHTS *and* MEASURES.

In this book the pound of the goldsmith is made use of ; but not divided after their manner. We divide it thus :

The pound	} to contain	{	twelve ounces,
the ounce			eight drams,
the dram			three scruples,
the scruple			twenty grains.

We have also different measures for liquids, one is applied to beer and ale, the other to wine. In this book the latter is made use of, which is divided by physicians thus :

The pint	} to contain	{	sixteen ounces,
the ounce			eight drams.

A gallon is a measure equal to eight pints.

A spoonful denotes the measure of half an ounce.

REMARK.

Upon these weights and measures see the observations of the committee in the preceding Narrative, *p.* 43, &c.

The last paragraph of this head relating to a particular, which concerns solely the original language of the pharmacopœia, is here omitted ; it only describing the method used to distinguish, when by *libra* and *uncia* weights, and when measures are intended. *Libra* is used to denote,

denote both a pound in weight, and a pint in measure, and required a distinction to remove the ambiguity: but in our language the terms for denoting one and the other are different. In regard to the other word *uncia*, we also use the name of ounce both for the twelfth part of the pound, and the sixteenth part of the pint. In the following translation therefore, where the ounce denotes a measure, it is so expressed, *viz.* an ounce in measure, or the like; but for brevity it is generally used absolutely, when weight is signified by it.

MATERIA MEDICA.

THE MATERIA MEDICA.

A.

THE true Acacia, *Acacia*.
 Agaric, *Agaricus*.

Almonds, *Amygdalæ*: both the sweet and bitter.

Aloes, *Aloe socotorina*.

Alum, *Alumen*.

Ambar, *Succinum*.

Amomum, *Amomum racemosum*, vel *Sison*,
quod amomum officinis: the seed either of
 the true amomum, or of bastard stone-
 parsley.

Angelica, *Angelica*: the root from Spain,
 also the stalks, leaves, and seeds.

Anise, *Anisum*: the seed.

Antimony, *Antimonium*.

Stinking Arrach, *Atriplex olida*: the leaves.

Afa foetida, *Afa foetida*.

Asarabacca, *Asarum*: the leaves.

B.

Balaustine flowers, *Balaustia*.

Balm,

THE MATERIA MEDICA. 131

Balm, *Melissa* : the leaves.

Balsam of Copavia, *Balsamum Copavia*.

Balsam of Gilead, *Opobalsamum*.

Balsam of Peru, *Balsamum Peruvianum*.

Balsam of Tolu, *Balsamum Tolutanum*.

Bark of Eleutheria, *Cortex Elutheriæ*.

Peruvian, or Jesuit's Bark, *Cortex Peruvianus*.

Common Barley, *Hordeum distichum*.

Pearl Barley, so called, *Hordeum perlatum dictum*.

Bay, *Laurus* : the leaves.

Bdellium, *Bdellium*.

Benjamin, *Benzoinum*.

Bezoar, *Lapis Bezoar orientalis*.

Creeping Birthwort, *Aristolochia tenuis* : the root.

Long Birthwort, *Aristolochia longa* : the root.

Bishops weed, *Ammi* : the seed.

Bistort, *Bistorta* : the root.

Bloodstone, *Hæmatitis*.

Bole Armenic, *Bolus Armenia*.

French bole, *Bolus Gallica*.

Borax, *Borax*.

Box, *Buxus* : the wood.

Brimstone, or Sulphur, *Sulphur*.

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Brooklime, *Becabunga* : the leaves.
Buckbean, *Trifolium paludosum* : the leaves.
Buckthorn, *Spina cervina* : the berries.
Burnet Saxifrage, *Pimpinella saxifraga* : the
root.

C.

Calamint, *Calamintha* : the leaves.
Calamy, *Lapis calaminaris*.
Camomile, *Chamæmelum* : the leaves and
flowers.
Camel's hay, *Juncus odoratus*.
Camphire, *Camphora*.
Cantharides, or Spanish flies, *Cantharides*.
Lesser Cardamom, *Cardamomum minus* : the
seed.
Carduus, or holy thistle, *Carduus benedictus* :
the leaves.
Carraway, *Carrui* : the seed.
Carrot of Crete, *Daucus Creticus* : the seed.
Casia of the Cane, *Casia fistula*.
Russian Castor, *Castoreum Russicum*.
Casumunar, *Casumunar*.
Cerusse, or white lead, *Cerussa*.
Lesser Centaury, *Centaurium minus* : the
tops.
Chalk, *Creta*.

Cinna-

THE MATERIA MEDICA. 133

Cinnamon, *Cinnamomum*: the spice itself,
and its distilled or essential oil.

Cinquefoil, *Pentaphyllum*: the root.

Cloves, *Caryophylla aromatica*: the spice
itself, and the distilled or essential oil.

Clove July-flowers, *Caryophylla rubra*.

Cochineal, *Coccinella*.

Coloquintida, or bitter apple, *Colocynthis*:
the pith of the apple.

Contrayerva root, *Contrayerva radix*.

Copper, *Cuprum*.

Red Coral, *Corallium rubrum*.

Coriander, *Coriandrum*: the seed.

Costus, *Costus*.

Cowslips, *Paralysis flores*.

Crabs claws, *Cancrorum chelæ*.

Crabs eyes, so called, *Cancrorum oculi dicti*.

Water Cresses, *Nasturtium aquaticum*: the
leaves.

Cuckow-pint, *Arum*: the root.

Wild Cucumber, *Cucumis agrestis*: the
fruit.

Cummin, *Cuminum*: the seed.

D.

Dill, *Antheum*: the seed.

I 3

Dittany,

134 THE MATERIA MEDICA.

Dittany of Crete, *Dictamnus Creticus* : the leaves.

Dragon's blood, *Sanguis draconis*.

E.

Elder, *Sambucus* : the flowers and berries.

Elecampane, *Enula campana* : the root.

Hens Eggs, *Ova gallinacea*.

Eryngo, *Eryngium* : the root.

F.

Sweet Fennel, *Fœniculum dulce* : the seed.

Fenugreek, *Fœnu Græcum* : the seed.

Feverfew, *Matricaria* : the leaves.

Dried Figs, *Caricæ*.

Sweet Flag, *Calamus aromaticus* : the root.

Yellow Water-Flag, *Gladiolus luteus* : the root.

Female Fluellin, *Elatine* : the leaves.

Frankincense, *Thus*.

G.

Galbanum, *Galbanum*.

Gamboge, *Gambogia*.

Galls, *Gallæ*.

Garlick, *Allium* : the root.

Gentian, *Gentiana* : the root.

Creep-

THE MATERIA MEDICA. 135

Creeping Germander, *Chamaedrys*: the tops with the seeds.

Water Germander, or Scordium, *Scordium*: the leaves.

Ginger, *Zingiber*.

Gum ammoniac, *Gummi ammoniacum*.

Gum Arabic, *Gummi Arabicum*.

Gum dragant, *Tragacantha*.

Gum elemi, *Gummi elemi*.

Gum guaiacum, *Guaiaci gummi*.

H.

Hartshorn, *Cornu cervi*.

Hartwort, *Seseli*: the seed.

Black Hellebore, *Helleborus niger*: the root.

White Hellebore, *Helleborus albus*: the root.

Hips, *Cynosbati fructus*.

Honey, *Mel*.

Horehound, *Marrubium*: the leaves.

Horse-radish, *Raphanus rusticanus*: the root.

Hyssop, *Hyssopus*: the leaves.

I.

Jalap, *Jalapium*: the root.

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Japon earth, *Terra Japonica*.

Ipecacoanha, *Ipecacoanha* : the root.

Iron, *Ferrum*.

Juniper, *Juniperus* : the berries.

Ground Ivy, *Hedera terrestris* : the leaves,

K.

Kermes juice, *Kermes succus*.

L.

Labdanum, *Labdanum*.

Hog's-lard, *Axungia porcina*.

Lavender cotton, *Abrotanum fœmina* : the leaves.

Lavender, *Lavendula* : the flowers.

French Lavender, *Stæchas*.

Red Lead, *Minium*.

Indian leaf, *Malabathrum folium*.

Lemons, *Limones* : the juice, peel, and the effence so called.

Lignum vitæ, *Guaiacum lignum* : the wood itself, and the bark.

Lime, *Calx*.

Lime tree, *Tilia* : the flowers.

Linseed, *Lini semen*.

Liquorice, *Glycyrrhiza* : the root.

Litharge, *Lithargyrus*.

Ground

THE MATERIA MEDICA. 137

Ground Liverwort, *Lichen cinereus terrestris*.

Logwood, *Lignum tinctile Campechense*.

M.

Mace, *Macis*.

Madder, *Rubia tinctorum*.

English Maidenhair, *Trichomanes*: the leaves.

Mallows, *Malva*: the leaves, and flowers.

Marsh mallows, *Althæa*: the root, and leaves.

Manna, *Manna*.

Sweet marjoram, *Majorana*: the leaves.

Wild marjoram, *Origanum*: the leaves.

Gum mastich, *Gummi mastiche*.

Herb mastich, *Marum vulgare*: the leaves.

Cat mint, *Nepeta*: the leaves.

Spear mint, *Mentha vulgaris*: the leaves.

Pepper mint, *Mentha piperitis*: the leaves.

Mugwort, *Artemisia*: the leaves.

Mulberry, *Morum*.

Musk, *Moscus*.

Mustard, *Sinapi*: the seed.

Mithridate mustard, *Thlaspi vaccariae incano folio*: the seed.

Treacle

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Treacle mustard, *Thlaspi arvense*: the seed.
Myrrh, *Myrrha*.

N.

Celtic Nard, *Nardus Celtica*.
Navew, *Napus*: the seed.
White Dead-Nettle, *Lamium album*: the flowers.
Nitre, or saltpetre, *Nitrum*.
Nutmeg, *Nux moschata*: the nutmeg itself, its distilled or essential oil, and the expressed oil usually called oil of mace.

O.

Oil olive, *Oleum olivarum*.
Olibanum, or Male frankincense, *Olibanum*.
Onion, *Cepa*.
Opopanax, *Opopanax*.
Seville Orange, *Aurantium Hispalense*: the juice, and the peel.
Florentine Orris, *Iris Florentina*: the root.
Oystershells, *Ostreorum testæ*.

P.

Common Parsley, *Petroselinum vulgare*: the seed.

Macedo-

THE MATERIA MEDICA. 139

Macedonian Parsley, *Petroselinum Macedonicum*: the seed.

Pellitory of Spain, *Pyrethrum*: the root.

Pellitory of the wall, *Parietaria*: the leaves.

Pennyroyal, *Pulegium*: the leaves.

Black Pepper, *Piper nigrum*.

Jamaica Pepper, *Piper Jamaicense*.

Long Pepper, *Piper longum*.

White Pepper, *Piper album*.

Ground Pine, *Chamæpitys*: the leaves.

Piony, *Pæonia*.

Burgundy Pitch, *Pix Burgundica*.

Common Pitch, *Pix arida*.

Jew's Pitch, *Bitumen Judaicum*.

Poley mountain, *Polium*: the tops.

Pomegranate, *Granatum*: the rind.

White Poppy, *Papaver album*: the heads,
and its juice inspissated, named Opium.

Red Poppy, *Papaver erraticum*: the
flowers.

Russian Potash, *Cineres Russici*.

French Prunes, *Pruna Gallica*.

Q.

Quicksilver, *Argentum vivum*.

Quinces,

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Quinces, *Cydonia mala*: the fruit itself, and its seed.

R.

Raisins, *Uvæ passæ*.

Rape of cistus, *Hypocistis*: the inspissated juice.

Rasberries, *Rubi Idæi fructus*.

Rhubarb, *Rhabarbarum*.

Damask Rose, *Rosa Damascena*.

Red Rose, *Rosa rubra*.

Rhodium Wood, *Lignum Rhodium*.

Rosemary, *Rosmarinus*: the tops and flowers.

Rue, *Ruta*: the leaves.

S.

Saffron, *Crocus*.

Sagapenum, *Sagapenum*.

Sage, *Salvia*: the leaves.

St. John's wort, *Hypericus*: the leaves, and flowers.

Sal ammoniac, *Sal ammoniacus*.

Epſom Salt, ſo called, *Sal catharticus amarus*.

Sal-gem, *Sal gemmæ*.

Sea Salt, *Sal marinus*.

Sarcocol, *Sarcocolla*.

Sarſapa-

THE MATERIA MEDICA. 141

Sarsaparilla, *Sarsaparilla* : the root.

Sassafras, *Sassafras* : the root and bark of the same.

Savine, *Sabina* : the leaves.

Red Saunders, *Santalum rubrum*.

Scammony, *Scammonium*.

Belly of the Scink, *Scinci venter*.

Garden Scurvygrass, *Cochleari hortenfsis* : the leaves.

Sena, *Sena* : the leaves.

Mutton Sewet, *Sevum ovillum*.

Silver, *Argentum*.

Sloes, *Pruna sylvestria*.

Virginia Snake-root, *Serpentaria Virginianæ radix*.

Soft Soap, *Sapo mollis*.

Spanish Soap, *Sapo durus ab Hispaniâ*.

Wood Soot, *Fuligo lignorum combustorum*.

Wood Sorrel, *Lujula* : the leaves.

Southernwood, *Abrotanum mas* : the leaves.

Sperma ceti, so called, *Sperma ceti dictum*.

Spignel, *Meum Athamanticum*.

Spikenard, *Nardus Indica*.

Proof Spirit of wine, *Spiritus vinosus tenuior*.

Rectified Spirit of wine, *Spiritus vinosus rectificatus*.

Sponge,

142 THE MATERIA MEDICA,

Sponge, *Spongia*.

Squills, *Scillæ*.

Steel, *Chalybs*.

Storax, *Styrax calamita*.

Brown Sugar, *Saccharum rubrum*.

Double refined Sugar, *Saccharum purissimum*.

T.

Tamarind, *Tamarindus* : the fruit.

Tansey, *Tanacetum* : the leaves.

Tar, *Pix liquida*.

Barbadoes Tar, *Petroleum Barbadenſe*.

Tartar, *Tartarum* : the tartar itself, and the
crystals usually called cream of tartar.

Lemon Thyme, *Thymus citratus* : the leaves.

Syrian Maſtich Thyme, *Marum Syriacum* :
the leaves.

Tin, *Stannum*.

Tormentil, *Tormentilla* : the root.

Chio Turpentine, *Terebinthina e Chio*.

Common Turpentine, *Terebinthina commu-
nis*.

Straſbourg Turpentine, *Terebinthina Argen-
toratenſis*.

Turmeric, *Curcuma*.

Tutty, *Tutia*.

V.

Wild Valerian, *Valeriana sylvestris*: the root.

Verdegris, *Ærugo*.

Vinegar, *Acetum*.

Violets, *Violæ*.

Vipers, *Viperæ*.

Blue Vitriol, *Vitriolum cæruleum*.

Green Vitriol, *Vitriolum viride*.

White Vitriol, *Vitriolum album*.

W.

White Wax, *Cera alba*.

Yellow Wax, *Cera flava*.

Wheat, *Triticum*: flour, and starch.

Canary Wine, *Vinum Canarinum*.

Red Port-Wine, *Vinum rubrum*.

Rhenish Wine, *Vinum Rhenanum*.

White Wine, *Vinum album*.

Winter's bark, so called, *Canella alba*.

Wood-lice, *Millepedæ*.

Common Wormwood, *Abfinthium vulgare*:
the leaves.

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Sea Wormwood, falsely with us called Roman Wormwood, *Absinthium maritimum*: the tops.

Z.

Zedoary, *Zedoaria*: the root.

PRÆPA-

PRÆPARATIONES SIMPLICIORES,

THE MORE SIMPLE PREPARATIONS.

TERREORUM

Aliorumque, quæ aquâ non dissolvuntur,
corporum præparatio.

The PREPARATION

Of terrestrious and such other bodies, as
will not dissolve in water.

THESE bodies are first to be pounded in a mortar, then levigated with a little water upon a hard and smooth marble into an impalpable powder, afterwards dried upon a chalk-stone, and then set by for a few days in some warm, or at least, very dry place.

After this manner are to be reduced into powder Ambar; Antimony; Bezoar, which should be levigated with spirit of wine instead of water; Blood-stone; Calamy, first calcined for the use of the makers of brass; Chalk; Coral; Crabs claws; Crabs eyes, so called; Egg-shells, first separated from

K

the

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the membrane adhering to them by boiling in water; Oyster-shells, first cleansed; Pearls; Verdegris; Tutty.

In antimony, calamy, and tutty, singular care ought to be taken to reduce them into the most subtle powder possible.

R E M A R K.

The grinding bezoar with spirit of wine instead of water improves the green hue, which is expected in that powder.

Calamy is a substance extremely hard; tutty is chiefly appropriated to that tender organ, the eye; antimony is formed in striæ, which, when powdered, break into needle-like fragments, which, if not thoroughly comminuted, may by their points wound the stomach: hence no care can be too great for rendering these substances smooth.

A X U N G I Æ P O R C I N Æ,
S E V I que O V I L L I
curatio,

The PURIFICATION, or TRYING
of HOG'S LARD and MUTTON
SEWET.

Melt them by a gentle fire with the addition of a little water, after they have been
first

PREPARATIONS. 147

first chopt into small pieces; and then strain them from the membranes intermixed.

REMARK.

The water is added to secure these substances more effectually from burning and turning black, which they would otherwise be subject to; for the water not being capable, even by the strongest fire, of receiving any greater degree of heat than that which causes it to boil, will keep the bottom of the vessel from growing too hot more securely, than any care in regulating the fire can do.

AXUNGIAE VIPERINÆ

curatio,

The PURIFICATION of VIPERS

FAT.

Melt the fat first separated from the intestines with a gentle heat, and then strain it out through a thin cloth.

REMARK.

Here it is not necessary to be very curious in picking out the fat; it is sufficient,

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if

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if the heart, liver, and other bloody parts are taken away ; the rest of the membranes crisp up, while the fat melts, so as easily to be separated by straining.

In this process water is not so much required as in the preceding ; the quantity of fat purified being here so small, that the heat is easily regulated without it.

MELLIS DESPUMATIO,

The DESPUMATION, or CLARIFYING of HONEY.

Liquify the Honey by a Balneum of water ; that is, by setting the vessel containing the honey into hot water ; and let the scum, that rises, be taken off.

REMARK.

By this process the honey becoming liquid, all waxy or other heterogeneous parts, which it has received in pressing from the comb, separate out of it.

SCILLÆ

SCILLÆ COCTIO,
The BAKING of SQUILLS.

Inclose the squill in paste of wheat flower, having first separated the outer skin and the hard part, from which the fibrous roots grow; then bake the squill in an oven, till the paste is dry, and the squill is rendered soft and tender throughout.

REMARK.

This preparation is an ingredient in the *theriaca*, or Venice treacle; and the design of the ancients in baking squills was to abate their acrimony*.

SCILLÆ EXCICCATIO,
The DRYING of SQUILLS.

Cut the squill, after the outer skin has been taken off, transversely into thin slices, and dry it with a very gentle heat.

REMARK.

The more usual method directed for this process has been to separate the several

* See *Dioscorid. L. II. c. 202.*

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laminæ, or coats, which compose the squill; but by that way the squill will be much longer in drying.

RHABARBARI et NUCIS
MOSCHATÆ TORREFACTIO,

The ROASTING of RHUBARB and
NUTMEG.

Roast them with a gentle heat, till they become easily friable into powder.

REMARK.

Here the roasting should be discontinued, as soon as the substance is become dry enough to powder freely.

SPONGIÆ USTIO,

The BURNING of SPONGE.

Heat the Sponge in a covered vessel, till it becomes black, and is easily friable; then reduce it to powder in a glass or marble mortar.

REMARK.

The heat here used must be much greater than in the former process; but however

ever, care should be taken not to burn the sponge, till its volatile salt be expelled; for so doing would reduce it to a mere coal: but the volatile salt is so much extricated from the other principles by this operation, that if it be rubbed to powder in a brass or bell-metal mortar, it is very apt to acquire from the vessel a taint, that will offend the stomach.

CORNU CERVI CALCINATIO,

The CALCINATION of HARTSHORN.

Burn pieces of hartshorn in a potter's furnace, till they become perfectly white; then reduce them to powder after the same manner as other terrestrious substances.

REMARK.

The intention of this operation is to burn out from the horns all that is volatile, and leave only the terrestrious part; here therefore the heat cannot be too great.

PULPARUM EXTRACTIO,

The EXTRACTION of PULPS.

Pulpy fruits, that are unripe, and those which are ripe, if dry, are to be boiled

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in a small quantity of water, till they become soft; then the pulp is to be pressed through a strong hair-sieve, and afterwards boiled over a gentle fire, and continually stirred to avoid burning, till it is brought to a due consistence.

Casia is also to be boiled out from the pod or cane bruised, and reduced afterwards to a just consistence by evaporating the water.

The pulps of fruits, which are both ripe and fresh, are to be pressed out without any previous boiling.

STYRACIS COLATIO,

The STRAINING of STORAX.

Boil storax in water, till it become soft, then press it out between warm iron plates, and separate the storax now cleared of its dregs from the water.

REMARK.

The storax being a refine only softens by the heat of the water, but does not dissolve in it.

OPIUM

OPIUM COLATUM,
 vel
 EXTRACTUM THEBAICUM,
 OPIUM STRAINED, otherwise called
 the THEBAIC EXTRACT.

Take of opium cut into small bits one pound weight; dissolve it into a pulp with one pint or less of boiling water, with care to avoid burning; and while it remains quite hot, press it strongly through a linen cloth from it dregs; then reduce the strained opium by a water balneum, or other small heat to its first consistence.

Opium softened in this small quantity of water passes the strainer unaltered in its substance, and freed only from dregs; but if it be dissolved in a large quantity of water, the gummy and resinous parts will divide from each other.

AFTER the same manner the rest of the gums may be purified, such as Gum Ammoniac, Afa foetida, Galbanum, and the like. But a greater quantity of water may be safely used. If the resinous part subsides,

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fides, let it be taken out, and added towards the conclusion of the inspissation, that it may unite with the rest into one uniform mass.

Any gum, as galbanum, which easily melts, may be purified by including the gum in a bullock's bladder, and retaining it in warm water; till the gum becomes soft enough to be separated from its dregs by pressing through a canvas strainer.

REMARK.

In relation to opium, it has been made a controversy, whether it would perform its office as a medicine better, when the resinous part should be separated from it; but this process has no relation to that dispute, the intention here being to purify the opium from its dregs with as little change made in the gum itself as possible. When the quantity purified at once is large, it is most commodious to inspissate it again by a balneum of boiling water: for this heat is so small as effectually to secure against burning the gum; but when the quantity wrought on is small, it may be very safely performed with less apparatus, only by keeping the gum stirring, and removing it from
the

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the fire, whenever there is any suspicion of its growing too hot.

MILLEPEDARUM PRÆPARATIO,

PREPARATION of MILLEPEDES.

Let millepedes be inclosed in a thin canvas cloth, and suspended within a covered vessel over the steam of hot spirit of wine; and they will soon be killed by the vapour, and be rendered friable.

REMARK.

This is a very ready method of rendering millepedes fit for pulverizing without risking any loss of their substance.

CONSERVÆ,

C O N S E R V Æ,

C O N S E R V E S.

C O N S E R V Æ,

C O N S E R V E S

Of the leaves of Garden-scurvy-grafs,

Spear-mint,

Rue,

Wood-sorrel;

Of the tops of Sea-wormwood;

Of the flowers of Lavender,

Mallows,

Rosemary,

Red roses, while in bud;

Of the outer yellow part of Seville Orange
peel.

The leaves are to be plucked from their stalks, and the flowers from their calix's, the outer rind of the orange-peel should be scraped off with a rasp, or grater; every one of them, when thus prepared, is to be pounded in a mortar with a wooden pestle, first by itself, and then with the addition of three times its weight of double refined sugar, till they are well incorporated together.

R E M A R K.

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REMARK.

Orange-peel and roses are most usually prepared for mixing with sugar, by grinding them in a wooden mill contrived for that purpose.

CONSERVA FRUCTUS CYNOSBATI,

CONSERVE of HIPS.

Take of the pulp of ripe hips one pound, of double refined sugar twenty ounces; and mix them into a conserve.

CONSERVA PRUNORUM SYLVESTRIMUM.

CONSERVE of SLOES.

Scald the sloes in water to soften them, taking care their skins are not broken; then take them out and express their pulp, which mix with thrice its weight of double refined sugar,

CONDITA,

C O N D I T A,

P R E S E R V E S.

RADIX ERYNGII CONDITA,

CANDIED ERYNGO-ROOT.

Boil the roots, till the rind will easily peel off: when peeled, slit them through the middle, and the pith being taken out, wash them three or four times in cold water. Then take for every pound of roots so prepared two pounds of double refined sugar; dissolve the sugar in water, set it over a fire, and as soon as it begins to boil, put in the roots, and continue the boiling till they become soft.

In the same manner are candied Angelica stalks.

CORTEX AURANTIORUM

CONDITUS,

CANDIED ORANGE-PEEL.

Soke the fresh peels of Seville oranges in water, and change it often, till the peels lose all bitterness; then boil them with
double

double refined sugar dissolved in water, till they become soft and transparent.

LEMON-PEEL is likewise to be candied in the same manner.

GENERAL REMARK.

Preserves are of two kinds: the subject may either be preserved moist in the syrup; or taken out and dried, that the syrup may candy upon it; and this is the most usual form of keeping all the particulars here proposed.

SUCCI,

S U C C I,

J U I C E S.

SUCCI SCORBUTICI,

The SCORBUTIC JUICES.

Take of the juice of garden-scurvy-grass a quart; the juice of brooklime, and of water-creffes, of each one pint; of the juice of Seville oranges a pint and a quarter. These being mixed, let them stand, till the dregs subside; then let the juice be poured off clear, or strained.

REMARK.

Here is a small deviation from the prescription in common use; for which see the Narrative of the committee, p. 50.

ROB BACCARUM SAMBUCI,

ROB of ELDER-BERRIES.

Let the depurated juice of elder-berries be inspissated with a gentle heat to a proper consistence.

R E M A R K.

This is otherwise prepared with a small addition of sugar ; but as the juice thus inspissated will keep without, the omission of the sugar is here preferred.

E L A T E R I U M,

E L A T E R I U M.

Slit ripe wild-cucumbers, and pass the juice, very gently pressed out, through a very fine hair sieve into a glazed vessel ; set it by some hours, till its thicker part shall have subsided : then pour off as much of the thin part of the juice, as can conveniently be done, by inclining the vessel, and draw away the rest by the filtre : let the thicker part, which remains, be covered over with a linen cloth and dried either in the sun or by a gentle fire.

R E M A R K.

The filtre here meant is a twist of linen thread or cotton laid over the edge of the vessel, one end touching the liquor within, and the other hanging without so long, that the liquor imbibed by the thread may drip from it, till all the moisture is drained away

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EXTRACTA et RESINÆ,
EXTRACTS AND RESINES.

EXTRACTA,
EXTRACTS,

Of the roots of Elecampane,
Gentian,
Black Hellebore ;
Of the leaves of Rue,
Savine.

Boil them in water, strain and press out the decoction, and set it by, till its dregs are subsided ; then boil it to the consistence of a pill, with care toward the end to avoid burning.

EXTRACTUM GLYCYRRHIZÆ,
EXTRACT of LIQUORICE.

Boil the fresh roots of liquorice lightly in water, strain and press out the decoction ; then, after its dregs are subsided, boil it away, till it will not stick to the fingers, using due care toward the end to avoid burning.

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EXTRACTUM LIGNI
CAMPECHENSIS,

EXTRACT of LOGWOOD.

Take of logwood in powder one pound.
Boil it four times, or oftner, in a gallon
of water to half; then boil all the liquors,
mixt together and strained, to a just con-
sistence.

REMARK.

This wood yields its tincture with so
much difficulty, that it should be reduced
to very fine powder before boiling.

EXTRACTUM CORTICIS
PERUVIANI
MOLLE et DURUM,

EXTRACT of PERUVIAN BARK
both

SOFT and HARD.

Take of Peruvian bark reduced to pow-
der one pound, of water ten or twelve
pints. Boil for an hour or two, and pour

L 2

off

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off the liquor, which will be red and transparent, but as soon, as it grows cold, becomes yellow and turbid ; boil the bark again in the same quantity of fresh water, as before, repeating these boilings, till the liquor remains transparent, when cold : then evaporate all these decoctions, strained and mixt together, to the proper consistence over a very gentle fire, with due care to avoid burning.

This extract is to be prepared under a double form, one, of the consistence of a pill, the other, hard enough to be reduced to powder.

REMARK.

This extract is ordered here with water only, though many begin the operation by making a tincture with spirit of wine, or at least with proof spirit. The college have approved of the reasons assigned by their committee for directing the process, as it stands here*. The principle, upon which those proceed, who begin with spirit, is, that the resinous, part may be more completely extracted. But though this drug contains resinous parts, yet they are so

* See the Narrative of the committee, p. 50.

EXTRACTS AND RESINES. 165

united with other parts dissolvable in water, that they freely boil out with them : and this is the reason, that the first decoctions, though transparent when hot, grow turbid when cold, the resinous parts being then something less perfectly united with the water. However, when the water is evaporated, the whole composes a very uniform consistence. Those who extract the resinous parts separately by the means of spirit ; are obliged to use an artifice for uniting the refine with the watry extract, which is to dissolve the refine by the addition of a due quantity of spirit of wine. This has made some imagine it to be always needful to add a little spirit of wine, when the extract is near finished. But when the extract is made by water only, I have not found this necessary.

EXTRACTUM LIGNI GUAICI MOLLE et DURUM,

EXTRACT of LIGNUM VITÆ
SOFT and HARD.

Take of the shavings of lignum vitæ one pound. Boil them four times or oftner in a gallon of water to half: then inspissate the liquors, after they have been strained : but

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when

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when the water is near all dried away, add a small portion of rectified spirit, by which the extract shall be brought to a uniform and tenacious mass.

This extract is also to be prepared under two forms, one softer, and the other harder.

REMARK.

Here also the resinous parts of the wood boil out with the rest of the juice; but they abound in this wood so much more than in the subject of the former process, that when the decoctions are reduced toward the consistence of an extract, the resinous parts adhere ill with the rest, and cause the extract to break into lumps. Therefore a little spirit of wine must necessarily now be added to dissolve the refine, whereby the whole will be reduced to a smooth and tenacious substance.

EXTRACTUM JALAPII,

EXTRACT of JALAP.

Pour upon Jalap root powdered rectified spirit of wine, and with a due heat draw a tincture, and boil the residue several times
in

EXTRACTS AND RESINES. 167

in water : after straining draw off the spirit from the first tincture, till it begins to thicken ; inspissate also the strained decoctions ; then mix the two extracts, and with a gentle fire reduce them to the consistence of a pill.

REMARK.

The use of both spirit and water in preparing this extract is here ordered, as the most compendious method of performing the operation, and the two extracts will readily unite together by the method here described

EXTRACTUM CATHARTICUM,

The CATHARTIC EXTRACT.

Take of Socotorine aloes an ounce and an half ; of the pith of coloquintida six drams ; scammony, the lesser cardomom seeds husked, of each half an ounce ; of proof spirit a pint. The spirit being poured upon the coloquintida cut small, and the seeds bruised, draw a tincture with a gentle heat continued four days ; then to the tincture pressed out add the aloes and scammony, first separately reduced to powder ; and these

L 4

being

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being dissolved, draw off the spirit, and reduce the mass to the consistence of a pill.

REMARK.

This is intended as an equivalent for the *Pilulæ Rudii*, a boasted secret of *Eustachius Rudius*. One ingredient of the original is that inconsistent medley called *Diarrhodon Abbatis*, which is to be found in our former pharmacopœias, and taken from that *Nicolaus*, of whom the committee in their report to the college have given an account at large*. In the two last pharmacopœias of the college this absurd composition was changed for a small number of spices. But their flavour being too volatile, cardamom seeds are here substituted in their room, whose flavour, consisting in their resinous parts, remains very strong in their extract†.

GUMMI et RESINA ALOES,

The GUM and RESINE of ALOES.

Take of Socotorine aloes four ounces, of water a quart. Boil the aloes till it is dissolved, as much as may be, and

* See the Narrative of the committee, p. 17.

† Ibid. p. 51, &c.

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set all by for a night: the refine will be precipitated to the bottom of the vessel; the liquor poured off or strained, being evaporated will leave the gum.

REMARK.

The intention of this separation of the refine is to procure in the gum a medicine less purgative, but more agreeable to the stomach than the crude aloes.

NOTE.

Whenever any extract is prepared in a great quantity, it is most conveniently reduced to its consistence by the heat of a balneum of water.

Again, all watry extracts should be moistened or sprinkled with a little spirit of wine to prevent their growing mouldy.

OLEA

O L E A
per
E X P R E S S I O N E M,
E X P R E S S E D O I L S.

OLEUM AMYGDALINUM,
O I L of A L M O N D S.

Let either sweet or bitter almonds, that are fresh, be pounded in a stone mortar, and then the oil forced out with a press not heated

AFTER the same manner should the oil be pressed from Linseed and Mustardseed.

R E M A R K.

It has been customary to distinguish between the oils of sweet and bitter almonds; but it is now universally allowed, that the oil of both is altogether the same, and in practice are made from both promiscuously: therefore that distinction is here laid aside.

The

EXPRESSED OILS. 171

The direction for avoiding the use of heat in preparing all these oils is of great importance to be observed : for as these are intended for internal use, heat gives them a very prejudicial rancidness.

OLEA

O L E A
per
DISTILLATIONEM,
DISTILLED OILS.
OLEA ESSENTIALIA,
ESSENTIAL OILS.

From the root of Saffafras ;
 From Rhodium wood ;
 From the leaves of Sweet marjoram,
 Wild marjoram,
 Pepper-mint,
 Spear-mint,
 Penny-royal,
 Rosemary,
 Rue,
 Savine,
 Wormwood;
 From the flowers of Camomile,
 Lavender ;
 From the seeds of Anise,
 Carraway,
 Cummin,
 Dill ;
 From Juniper-berries ;
 From

DISTILLED OILS. 173

From the Spices,

Cloves,

Nutmeg, and others.

These oils are obtained by distillation with an alembic and large refrigeratory. Water must be added to the materials in sufficient quantity to prevent their burning; and the subject be macerated in that water a little time before the distillation. The oil comes over with the water, and either swims on the top, or sinks to the bottom, according as it is heavier or lighter.

OLEUM BUXI,

OIL of Box.

Distill pieces of box in a retort with a fire gradually raised: the oil will come over with an acid spirit, from which the oil is to be separated by a funnel.

REMARK.

The method of separating oils and watry spirits by the funnel is this: to stop the stem of the funnel with a finger, and pour into the funnel both the liquors together, where they soon part, the heavier subsiding; then the undermost is to be let out by removing so far the finger, as to open the stem, and

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as soon as that is gone, the other is to be stopt by closing the stem again.

OLEUM LATERITIUM,

OIL of BRICKS,

Let bricks heated red-hot be plunged into oil olive, till the whole oil is imbibed : then the bricks being sufficiently broke are to be put into a retort ; and by a sand heat gradually augmented the oil will ascend with a spirit, which is to be separated from the oil.

REMARK.

This is an ancient preparation, and dignified with the pompous title of philosophic oil of bricks *.

OLEUM PETROLEI BARBADENSIS,

OIL of BARBADOES TAR.

Let Barbadoes tar be distilled in a sand heat, and oil will ascend with a spirit.

** Mes. antidot. Oleum philosophorum, quod etiam oleum sapientiæ, et perfecti magisterii et benedictum, et divinum, et sanctum quidam vocarunt.*

REMARK.

DISTILLED OILS. 175

REMARK.

This oil will be more or less thin, according as the distillation is continued. The tar will at last be reduced to a dry coal, and then the oil will be pretty deep in colour, though perfectly fluid. This oil has a property similar to the tincture of nephritic wood in water : looked upon, it appears blue, but held up to the light, and seen through, it is of an orange colour.

OLEUM TEREBINTHINÆ, OIL of TURPENTINE.

Turpentine is to be distilled with water in a copper still, like the essential oils of vegetables.

After the distillation remains in the still yellow Rosin.

This oil is often, though improperly called spirit of Turpentine.

REMARK.

The *terebinthina cocta*, which has had a place in our former pharmacopœias, as well as in others, is now not made an article in this, it being no other than the rosin left in this distillation.

OLEUM

152 DISTILLED OILS.

OLEUM TEREBINTHINÆ
ÆTHEREUM, et BALSAMUM;

The ÆTHEREAL OIL, and the BAL-
SAM of TURPENTINE.

Let oil of turpentine be distilled in a retort with a very gentle heat, till what remains is become of the consistence of a balsam.

Balsam of turpentine may also be distilled from yellow rosin, whence after a portion of oil, which must be removed in time, will come a thick balsam; a blackish rosin remaining in the retort, which is also called colophony.

OLEUM COPAIVA
COMPOSITUM,

COMPOUND OIL of BALSAM of
COPAIVA.

Take of Balsam of Copaiva two pounds, of Gum Guaiacum four ounces. Distill them together in a retort, till a pint is drawn off.

SALES

SALES et SALINA,
SALTS, AND SALINE PREPARATIONS.

NITRUM PURIFICATUM,
PURIFIED NITRE.

Boil nitre in Water, and strain the water through blossom paper; then after due evaporation set it by in a cold place, that the nitre may shoot.

In the same manner is purified sal ammoniac.

REMARK.

As the dispensatory supposes the apothecary and chemist to have learned the practical rules of his art, it was not thought necessary to describe the method of crystallizing these, or any of the following salts more minutely. The usual method is to evaporate the solution, till a kind of skin appears on the top. But this general direction fails in nitre. Here, when the liquor is become ready for shooting; if a little be

M

taken

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taken up in a spoon, as it cools, the salt will begin to shew itself in small threads.

ALUMEN USTUM,

BURNT ALUM.

Let alum be put into an iron or earthen vessel, and calcined as long, as it rises up and swells.

REMARK.

In this operation the watry part of the alum principally is expelled, the acid spirit still remaining with it.

VITRIOLUM CALCINATUM,

CALCINED VITRIOL.

Put green vitriol into an earthen vessel, and calcine it with an open fire as long, as it exhales any moisture; then take it out by breaking the vessel, and set it by for use well closed from the air. The vitriol is most perfectly calcined, if, at the bottom and sides of the vessel containing it, it is become red.

REMARK.

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REMARK.

In this calcination also the watry part is principally intended to be evaporated.

SAL ABSINTHII,

SALT of WORMWOOD.

Let the ashes of wormwood be put into an iron pot, and kept red hot by a strong fire for some hours, often stirring them, that all remains of oil may be burnt out; then boil them in water; strain the water, which will be impregnated with the salt, through paper, and evaporate it to dryness, then keep the salt in a vessel well stopd.

In this manner is to be prepared the fixt alkaline salt of any plant, whose ashes will yield that kind of salt.

REMARK.

When the oil is sufficiently burnt out, may be judged of, as the ashes are stirred up from time to time; for while the oil remains in them, they will take fire and sparkle upon their being turned up to the air. And this turning up the ashes, which lie at the bottom, to the air is necessary, that the oil may be effectually consumed.

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SAL TARTARI,

SALT of TARTAR.

Wrap up any species of tartar in strong brown paper, first made wet, or inclose it in a proper vessel, and expose it to the fire, that its oil may be burnt out, then boil it in water, and collect its salt, as before.

LIXIVIUM TARTARI,

LEY of TARTAR,

When the tartar is calcined white, let it be put in a damp place, that it may liquify by the moisture of the air.

REMARK.

In this process the liquor is rather more pure, than if the calcined tartar were dissolved directly in water.

TARTARUM SOLUBILE,

SOLUBLE TARTAR.

Take of any alkaline fixt salt a pound,
of water a gallon. The salt being dissolved

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solved in the water boiling, throw in crystals of tartar in powder as long, as any fermentation is raised, which usually ceases before thrice the weight of the alkali is throw in. Then strain the liquor through paper; and after due evaporation set it by for the salt to crystallize, or else evaporate the liquor wholly away, that the salt may be left dry.

REMARK.

Both here, and in the process for vitriolated tartar, the proportions between the salts are set down somewhat indefinitely, as an admonition to the operator, that the exact quantity of the salt thrown in is to be regulated by the fermentation; wherein particular care should be taken in the present process, that the alkaline salt do not abound, lest when the process is finished by evaporation, the preparation should retain any share of an alkaline quantity for want of a due saturation by the acid of the tartar.

This salt by the action of the alkali on the acid of the tartar being freed from those gross terrestrious parts, with which the crystals of tartar, how pure soever, re-

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main still charged; it dissolves readily, and keeps suspended in cold water.

LIXIVIUM SAPONARIUM, SOAP LEYS.

Take equal weights of Russia potash and quick lime, and throw water upon them, by degrees, till the lime is flaked; then throw on more water and stir all together, that the salt of the ashes may be dissolved; after some time pour the liquor, filtered through paper, if needful, into another vessel. A true standard wine pint of this liquor measured with the greatest exactness ought to weigh just sixteen ounces; if it is heavier, for every dram, it exceeds that weight, an ounce and a half of water in measure is to be added to each pint of the liquor; but, if it is lighter, it must be boiled, till the like quantity of water is carried off, or else must be thrown upon fresh lime and ashes.

REMARK.

Our makers of soft soap prepare their ley stronger than this: their ley will be reduced to the standard here proposed by mixing it with

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with something less than an equal measure of water.

SAPO AMYGDALINUS, ALMOND SOAP.

Take any quantity of fresh oil of almonds, and thrice its measure of the soap-leys. Digest them together for some time in such a heat, wherewith the mixtures shall but just boil, and within a few hours the oil and leys will be united; after which the liquor in boiling will soon become ropy and in a good degree transparent, and will cool into the consistence of a jelly; then throw in sea-salt, till the boiling liquor has lost its ropishness; continue the boiling, till drops of the liquor being received upon a tile, the water is seen to separate freely from the coagulated soap: then remove the fire, and the soap will gradually rise to the top of the liquor, which is to be taken out, before it is cold, and put into a wooden frame, which has a cloth for its bottom; in the last place being taken out it is to be set by, till it acquires its just consistence.

AFTER the same manner may soap be made with oil olive; in which the finest oil

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ought to be employed, that the soap may be as little ungrateful, either to the palate or stomach as possible.

REMARK.

Upon this process see the Narrative of the committee, p. 56.

CAUSTICUM

commune

FORTIUS,

The COMMON STRONGER CAUSTIC.

Boil to a fourth part any quantity of the soap-leys above described; then sprinkle in, while boiling, lime, that has been kept in a vessel pretty close stopt for several months; continue to add this lime, till all the liquor is absorbed, and the whole reduced to a paste, which is to be kept in a vessel well stopt.

REMARK.

The design of thus keeping the lime before it is used, is, that its acrimony may be a little abated. This caustic is preferable to that called the *lapis infernalis*, as it will not liquify, like that by the moisture of the part, on which it is applied; and

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and by this means keeps better confined within the limits, in which it is intended to operate. For this reason the *lapis infernalis* is little used at present by our surgeons; and therefore not inserted in this pharmacopœia.

CAUSTICUM

commune

MITIUS,

The COMMON Milder CAUSTIC.

Take of soft soap and of fresh quick lime equal parts; and mix them at the time of using.

REMARK.

Here in the soap the acrimony of the ley being by the mixture of oil and tallow, as it were, wholly retunded, the lime should be quite fresh without any abatement of its corrosiveness; for thus the caustic is a great deal milder than the former.

ACETUM

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ACETUM DISTILLATUM,

vel

SPIRITUS ACETI;

DISTILLED VINEGAR,

or

SPIRIT of VINEGAR.

Let vinegar be distilled with a gentle heat as long as the drops fall free from any empyreuma.

If some part of what comes first off, be thrown away, what is reserved will be stronger.

REMARK.

The principal care in this operation is to avoid too much heat; for then the liquor will unavoidably contract a burnt taste and smell. Also if the vinegar distilled be weak, what comes over at first ought indispensibly to be thrown away.

SAL DIURETICUS,

DIURETIC SALT.

Take of any alkaline fixt salt one pound; boil it in four or five pints of
of

of distilled vinegar with a very gentle heat: when the fermentation ceases, add more distilled vinegar; and when the fermentation arising from the addition is over, pour on another quantity of the like vinegar: and proceed thus till the vinegar being near all evaporated, fresh vinegar will not excite any fermentation; which will generally happen by the time about ten quarts of vinegar shall have been used: then gently evaporate to dryness. The salt left will be impure, which is to be melted for a time, but not too long, with a gentle heat, afterwards dissolved in water, and transcolated through paper. If the melting has been rightly performed, the strained liquor will be limpid and colourless, like water, but otherwise brownish. Lastly the water is to evaporated with a very gentle heat in a shallow vessel, the salt, as it dries, being frequently stirred, that the humidity may the sooner be discharged. This salt must be kept in a close vessel, that it may not run by the moisture of the air.

The salt ought to be very white, and should dissolve wholly, either in water, or spirit of wine without leaving any fæces.

If

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If the salt, though ever so white, leave in spirit any fœces, after it is dissolved in this spirit, it is to be filtered through paper, and dried again.

REMARK.

The success of this operation depends upon three circumstances, completing the saturation, duly calcining afterwards, and drying it at last without too much heat. For the first it is necessary to make the finishing tryal, when the liquor is almost evaporated away. The degree of calcination may be judged of by dropping a little into water, and observing, when it begins to part with its blackness very readily, and this point must be carefully watched; for the solution of the salt will be coloured, if the salt is too much calcined, as well as when too little: In the last drying care should be taken not to melt it; for then it will lose in some degree its whiteness, and will upon solution again depose dregs: though if it is not melted, it will not have that foliated appearance, from which this salt has obtained a name, viz. *terra foliata tartari*, the foliated earth of tartar. But when it is prepared so as to dissolve in-tire, it is more agreeable to the stomach, and a greater dose can be given of it than

PREPARATIONS. 189

than when it does not dissolve so completely.

SPIRITUS VITRIOLI TENUIS et FORTIS, atque COLCOTHAR;

The WEAK and STRONG SPIRIT
of VITRIOL, also the COLCOTHAR.

Vitriol, first calcined, is to be distilled in earthen vessels for three days without intermission, in a reverberatory heat; the liquor drove off being distilled over again in a glass retort with a sand heat, the weak spirit will ascend, the strong remaining behind, which is usually, though improperly, called oil of vitriol.

What remains in the earthen vessels after the first distillation, is called the colcothar of vitriol.

REMARK.

The earthen vessels, in which the vitriol is distilled, are commonly called long-necks. They are not of the shape of glass retorts; for the vapour rises from the vitriol

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triol so heavily, that these vessels are made of a form, which may give it an exit laterally.

The practical rule in the rectification is to distill, till the liquor in the retort, which at first is considerably black, becomes quite clear.

For the reason of changing the name of that called oil of vitriol, see the Narrative of the committee, p. 57.

SPIRITUS NITRI GLAUBERI,
GLAUBER'S SPIRIT of NITRE.

Take of nitre three pounds, of the strong spirit of vitriol one pound. Let them be mixt with caution and gradually under a chimney; afterwards let them be distilled first with a gentle heat, and then with a stronger.

REMARK.

The caution to make the mixture under a chimney is here very necessary to be observed; for fumes will rise very copiously, that are extremely pernicious. This spirit will set on fire any animal distilled oil, or the oils of the eastern spices in the same manner as in the process of *Hoffman* and Dr.

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Dr. *Slare*, who use the the nitre and oil of vitriol in equal proportion. But for more certain success in this effect the nitre should be dried, and *Hoffman's* direction followed of not pushing the distillation with too strong a fire.

SPIRITUS SALIS MARINI GLAUBERI

GLAUBER'S SPIRIT OF SEA-SALT.

Take sea salt, and the strong spirit of vitriol, of each two pounds; of water one pint. The oil and water being first mixt together, add the mixture gradually to the salt under a chimney: then distill, first with a small, and afterwards with a stronger fire.

REMARK.

It is most convenient to pour the spirit or oil of vitriol to the water in an earthen vessel; for in one of glass the mixture must be made very slowly, lest the vessel should be broke by the heat, which will follow upon too free an affusion of the spirit.

It is also prudent for the operator to put this mixture to the salt under a chimney;

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for

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for every degree of the fume arising ought here also to be avoided.

AQUA FORTIS,

AQUA FORTIS.

Take nitre, green vitriol not calcined, of each three pounds; of the same vitriol calcined a pound and a half. Mix all well together, and distill with a very strong fire, as long as red fumes arise.

REMARK.

The Refiners prepare their strong Aqua fortis solely from nitre and Dantzick vitriol uncalcined, in equal proportion. But with our vitriol the method here directed is to be preferred.

AQUA FORTIS COMPOSITA,

COMPOUND AQUA FORTIS.

Take of Aqua fortis sixteen ounces in weight, of sea salt one dram. Distill to dryness.

REMARK.

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REMARK.

For the design of this preparation see the Narrative of the committee, p. 55, 56.

SAL VITRIOLI, SALT of VITRIOL.

Take of white vitriol a pound, of the strong spirit of vitriol an ounce in weight, of water as much, as is sufficient. Dissolve the vitriol by boiling, then strain the decoction through paper, and after proper exhalation set it in a cold place, that the salt may shoot.

REMARK.

The spirit of vitriol improves the shooting of the salt.

TARTARUM VITRIOLATUM, VITRIOLATED TARTAR.

Take of green vitriol the weight of eight ounces, of water two quarts. The vitriol being dissolved in the water boiling, throw
N in

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in salt of tartar, or any other fixt alkali, till all fermentation ceases; which usually happens after throwing in four ounces, or something more of the alkaline salt. Then strain through paper, and evaporate daily, that the salt may crystallize.

REMARK.

The liquor should be kept boiling a little while, every time the alkaline salt is thrown in, that it may duly penetrate, and draw forth the acid spirit from the vitriol. The point of saturation is most exactly to be judged of by dropping the strong spirit or oil of vitriol into a spoonful of the liquor filtred; for as long as no beginnings of effervescence hereby appear, the alkaline salt does not exceed.

This salt may otherwise be prepared with a fixt alkali, and the strong spirit or oil of vitriol; but the preceding method best secures against a redundancy of acidity in the salt.

NITRUM VITRIOLATUM, VITRIOLATED NITRE.

Diffolve the cake left after the distillation of Glauber's spirit of nitre, as described

PREPARATIONS. 195

scribed above, in hot water, and after purifying through paper evaporate, that the salt may shoot.

REMARK.

It was principally in regard to this preparation that the spirit of vitriol in Glauber's spirit of nitre was directed in so small a quantity; for this salt is often used not only under its own peculiar name, but substituted for vitriolated tartar; and when made with a large quantity of the spirit, this salt is so acid, that it ought not by any means to be used in this manner.

SAL CATHARTICUS GLAUBERI,

GLAUBER'S CATHARTIC SALT.

Dissolve in water the cake, which remains after the distillation of Glauber's spirit of sea salt, purify the solution through paper, and then duly evaporate it, that the salt may crystallize.

REMARK.

It is the practice of many to use in the distillation of the spirit but two thirds of the

N 2

vitriolic

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vitriolic spirit directed above; but if that be taken in too small a proportion, the quantity of the salt produced will fall short of what would otherwise be obtained.

SPIRITUS SALIS MARINI COAGULATUS,

SPIRIT of SEA SALT COAGULATED.

Pour gradually upon the spirit of sea salt the lixivium of any fixt alkali, till all fermentation ceases; and then evaporate to dryness.

REMARK.

This is usually called the regeneration of sea salt, but falsely; for it is the acid spirit of sea salt united with the earth of a fixt alkali, which is not the same with the earth of sea salt.

SPIRITUS VITRIOLI DULCIS, DULCIFIED SPIRIT of VITRIOL.

Take of the strong spirit of vitriol, called the oil, one pound, of rectified spirit of wine one pint.

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Mix them cautiously and by degrees, and distill them with a gentle heat, till a black froth begins to rise, then remove all from the fire, that this froth may not swell over into the receiver and frustrate the operation.

SPIRITUS NITRI DULCIS, DULCIFIED SPIRIT of NITRE.

Take of rectified spirit of wine one quart, of Glauber's spirit of nitre half a pound. Mix them by pouring the spirit of nitre on the other, and distill the mixture with a gentle heat, as long as what comes off will not raise any fermentation with a lixivial salt.

REMARK.

Upon this preparation, see the Narrative of the committee, p. 54.

SPIRITUS SULPHURIS

per

CAMPANAM,

SPIRIT of SULPHUR by the BELL.

Let sulphur be set on fire under a glass vessel fitted for this purpose, which is usual-

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ly

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ly called a bell, and the acid spirit will drop from it, which is to be received into a dish placed underneath.

REMARK.

The glass employed in this operation has been described as of a shape similar to the bell-glasses used by gardeners to cover plants which are tender and require heat*. But it has been long the practice with us to use a glass, in which the lower rim is turned inwards, and the top is opened into a long stem†. This is much more convenient for the purpose, for without such an opening at top the fume from the sulphur will scarce rise far into the glass. The liquor here produced is the acid spirit of the sulphur condensed by uniting with the moisture of the air; in so much that the operation succeeds greatly the best in a damp place.

* See the representation in Le Febvre. chem. P. II, c. 10. § 6.

† See Wilson's chem. tabl. V. fig. 7.

S P I R I-

SPIRITUS, SAL,
 et
 OLEUM SUCCINI,

SPIRIT, SALT, and OIL of AMBAR.

Let ambar be distilled by a sand heat gradually increased. From it will arise a spirit, oil, and salt foul by a mixture of the oil.

The oil distilled again will part into a thinner oil, which will ascend, and a thicker part remaining called the Balsam of ambar.

The salt is to be boiled either in the spirit, or water, and set by to shoot: thus it will be freed from its oil; and the oftner this process is repeated, the purer will the salt be.

REMARK.

This spirit is an acid one, as that of the next process is alkaline. They both principally consist of the salt of the subject dissolved in water.

SPIRITUS, SAL,
et
OLEUM CORNU CERVI;
SPIRIT, SALT, and OIL of HARTS-
HORN.

Distill fragments of hartshorn with a fire gradually raised to a great height. A spirit, salt, and oil will ascend.

If the oil be separated, and the spirit and salt, mixt together, be distilled again with a very gentle heat, they will both rise more pure. If this is carefully repeated several times, the salt will become very white, and the spirit as limpid as water, with a grateful smell.

If the salt be separated, from the spirit and sublimed, first from an equal weight of fine chalk, and then again from a small quantity of rectified spirit of wine, it will become sooner pure.

Calcined hartshorn is for the most part made by burning the horns, after they have passed through the preceding operation.

AFTER the same manner a spirit, salt and oil may be distilled from any animal substance.

REMARK.

The spirit of the shops is usually rectified but twice, which is much too seldom. When no oftner rectified it partakes still so much of the fetid oil, that it is very offensive to the stomach; and however immediately after the rectification it may appear of a colour tolerably pale, yet it then sufficiently discovers by its abominable smell, how much it retains of the oil of the subject, which it soon shews to the eye also by its yellow colour. As the efficacy of this spirit depends upon the quantity of salt, it contains; so the farther it is freed from its oil, the more it will abound with salt.

S P I R I T U S, S A L,

et

O L E U M F U L I G I N I S;

The S P I R I T, S A L T, and O I L of
S O O T.

Distill wood foot in the same manner as hartshorn: but here more labour is required to render the spirit and salt pure.

REMARK.

REMARK.

The volatile salts and spirits, either from foot, or from any animal substance whatever, do not essentially differ from those, obtained from hartshorn, when they are rendered equally pure.

SAL VOLATILIS SALIS
AMMONIACI,

VOLATILE SALT of SAL AMMONIAC.

Take of the finest chalk, or whiting two pounds, of sal ammoniac one pound. Sublime the volatile salt in a retort with a strong fire.

REMARK.

This is the present practice of our chemists in making this salt. The process requires a strong fire, for the chalk must receive some degree of calcination, before it will act on the sal ammoniac; though it is not reduced to perfect lime, for with lime no solid salt can be obtained.

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SPIRITUS SALIS AMMONIACI,

SPIRIT of SAL AMMONIAC.

Take of any fixt alkaline salt a pound and a half, of sal ammoniac a pound, of water two quarts. With a gentle fire distill off one quart.

REMARK.

The preparation of this spirit with lime is omitted, that it may not be ever imprudently taken instead of this here described; for that is much too acrid for internal use.

SPIRITUS SALIS
AMMONIACI DULCIS,

DULCIFIED SPIRIT of SAL
AMMONIAC.

Take of any fixt alkaline salt half a pound, of sal ammoniac four ounces, of proof spirit three pints. Distill off with a gentle fire a pint and a half.

SPI-

SPIRITUS VOLATILIS
FOETIDUS,

FETID VOLATILE SPIRIT.

Take of any fixt alkaline salt a pound and a half, of sal ammoniac a pound, of asa foetida four ounces, of proof spirit three quarts. Distill off with a gentle heat five pints.

SPIRITUS VOLATILIS
AROMATICUS,

AROMATIC VOLATILE SPIRIT.

Take essence of lemons, essential oil of nutmegs, of each two drams; of essential oil of cloves half a dram; of dulcified spirit of sal ammoniac a quart. Distill with a very gentle fire.

REMARK.

This kind of spirit is usually called *spiritus volatilis oleosus*, and in common speech *sal volatile* drops. Why the name is here changed, see the Narrative of the committee, p. 58 These spirits are sometimes pre-

prepared with the aromatic plants themselves; but this from their oils, conformable to the method at present most commonly practised; and the particular composition here chosen, is the result of trials with most of the essential oils usually employed.

RESI-

RESINOSA et SULPHUREA,

RESINOUS and SUPHUREOUS
PREPARATIONS.

FLORES BENZOINI,

FLOWERS of BENJAMIN.

Put powdered Benjamin into an earthen pot placed in sand, and with a small heat the flowers will rise, and may be caught by a paper cone placed over the pot.

Or else the Benjamin may be put into a retort, and the flowers will ascend into and fasten themselves upon its neck.

The flowers, if tinged yellow, are to be mixt with tobacco-pipe clay, and sublimed again.

REMARK.

The latter way by the retort is most generally practised, when large quantities of these flowers are prepared.

F L O-

FLORES SULPHURIS,
FLOWERS of SULPHUR.

Let sulphur be sublimed in a fit vessel; and any part of the flowers, which may have concreted, are to be reduced to powder by a wooden mill, or in a marble mortar with a wooden pestle.

REMARK.

These flowers are usually made in such large Quantities, that they are sublimed into a room, where a man may enter to sweep them together. The sublimation may be performed for a small quantity by a retort; but care must be taken, that the receiver be removed far enough from the fire; otherwise the flowers will melt together too close to be reducible by grinding into the softness, which the flowers ought to have.

FLORES SULPHURIS LOTI,
FLOWERS of SULPHUR WASHED.

Pour water on the flowers to the height of three or four fingers above them, and
7 boil

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boil them for a time; then pour off this water, and with fresh cold water wash the remains of this away; then dry the flowers for use.

REMARK.

There is some degree of a rough acidity remains with the flowers of sulphur after their sublimation, as may be perceived by the taste in this water, wherein they are boiled, which fresh water will not receive from them, when they have been duly washed. And this lotion improves them for internal use, by preventing the gripings, which unwashed flowers of sulphur will sometimes occasion.

BALSAMUM SULPHURIS SIMPLEX,

The SIMPLE BALSAM of SULPHUR.

Boil flowers of sulphur in four times their weight of oil olive, in a pot lightly covered, till the oil and sulphur are joined into the consistence of a Balsam.

In the same manner is a balsam of sulphur also prepared with Barbadoes tar.

REMARK.

REMARK.

This operation is to be prepared with a vessel of an open mouth, but slightly covered. It is most usually done in an earthen pipkin covered by inverting a glass bottle into it.

SULPHUR PRÆCIPITATUM,
PRECIPITATED SULPHUR.

Boil flowers of sulphur with thrice their weight of quick lime, till the sulphur is dissolved, and filtre the solution through paper; then with weak spirit of vitriol make a precipitation, which is to be often washed, till it is become quite insipid.

REMARK.

There is a similar preparation directed in books of chemistry, with sulphur and alkaline salt; both that and this being described under the name of *lac sulphuris*, or milk of sulphur†. But with the salt the precipitated powder will not look so white as this; therefore the preparation is not in practice ever made after that manner, though in our former pharmacopœia either way of operation is directed promiscuously. But it was chosen to prescribe here only the method in use.

† For the present name. see the Narrative of the committee, p. 58.

AQUA SULPHURATA,
SULPHURATED WATER.

Take of water a quart, of sulphur half a pound. Let some portion of the sulphur, set on fire in an iron ladle, be suspended over the water in a close vessel; and let this be repeated as often as the fumes from the last sulphur subside, till the whole is burnt away.

REMARK.

This has been called *gas sulphuris*: for the change now made in the name, see the Narrative of the committee, p. 58, 59

The burning sulphur may very commodiously be suspended over the water by putting the water into a glass receiver so large, as to contain it conveniently with the mouth laid side-wise, the ladle holding the burning sulphur, being fixt to a wooden plug made to go freely into the neck of the receiver, which should be pretty long; this plug will then keep the ladle up horizontal, that it shall not dip into the water; and a cloth slightly thrown round the mouth of the receiver will sufficiently confine the fumes of the burning sulphur.

METALLICA,
METALLIC PREPARATIONS.

CHALYBIS RUBIGO
PRÆPARATA.

The RUST of STEEL PREPARED.

Expose filings of steel to the air, and moisten them sometimes with water or vinegar, till they are turned into rust; then rub them in a mortar, and by pouring on water wash off the finest powder; the residue, which by moderate rubbing, was not brought to a powder fine enough to be washed off, is again to be exposed moist to the air, and when farther rusted, is to be treated as before. The powder thus washed off is to be dried and kept for use.

REMARK.

It has been usual to confine this preparation to vinegar; but iron rusts so freely in the air, if it be moistened with water only, that no other material is necessary.

CHALYBS cum SULPHURE PRÆPARATUS.

STEEL PREPARED with SULPHUR.

Touch the steel heated to a white heat with a roll of brimstone, that the steel may melt, and drop into water placed under it. Then let it be separated from the sulphur, which has dropt along with it into the water, and be reduced into the finest powder.

REMARK.

The steel may be very commodiously heated for this purpose, either at a smith's forge, or in a chemist's ordinary melting furnace. The melted steel is easily picked out from the sulphur; for the steel lies in round drops of different sizes, and of a brown colour; the sulphur is in long yellow strings.

FLORES MARTIALES, MARTIAL FLOWERS.

Take of washed colcothar, of green vitriol,
or of iron-filings, one pound, of sal ammo-
niac

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niac two pounds. Mix and sublime them in a retort, and mixing again the bottom with the flowers, renew the sublimation, till the flowers acquire a beautiful yellow colour.

To the residue may be added half a pound of fresh sal ammoniac, and the sublimation repeated; and the same process may be thus continued on, as long as the flowers rise duly coloured.

REMARK.

In the preceding pharmacopœia the martial flowers, and *ens veneris* are two distinct preparations. But when the last is made with the colcothar of green vitriol, it does not in reality differ from the other prepared with the filings of iron. And this is the general practice now approved of by the college; nor is it unconformable to the original: most probably in the time of Mr. Boyle even by the Hungarian vitriol, to which he gives the preference, was understood with us some species of a chalybeate, as has been observed above*. It was for this reason, no doubt, that Mr. Wilson † joins the Hungarian and Dantzick vitriols together, as both green.

* P. 66.

† Course of chemistry P. I. ch. II.

LIXIVIUM MARTIS,

The L E Y of I R O N.

Set by the residue after the foregoing sublimation in a damp place, that it may liquify by the air.

S A L M A R T I S,

S A L T of I R O N.

Take of the strong spirit, or oil of vitriol, the weight of eight ounces, of filings of iron four ounces, of water a quart. Mix them; and when the ebullition has ceased, set the mixture some time upon a sand heat: then filtre the liquor through paper, and evaporate it, that the salt may crystallize.

R E M A R K.

Copperas purified by a fresh crystallization, is often used as a substitute for this preparation. And indeed our species of vitriol scarce containing any metallic parts besides iron, is less unfit for this purpose than all others.

CAUS.

PREPARATIONS. 215

CAUSTICUM LUNARE,

The LUNAR CAUSTIC.

Diffolve pure silver by a sand heat in about twice its weight of Aqua fortis; then dry away the humidity with a gentle fire, afterwards melt it in a crucible, that it may be poured into proper moulds, carefully avoiding over much heat, lest the matter should grow too thick.

REMARK.

The usual form into which this caustic is cast, is that of small sticks. If in melting too much fire is used, a vapour will copiously exhale from it, whereby it will become so thick, as not to run freely in the mould.

SACCHARUM SATURNI,

SUGAR of LEAD.

Boil cerusse in distilled vinegar in a leaden vessel, till the vinegar is sufficiently sweet; then filtre the vinegar through paper, and after due evaporation set it by, that the salt may shoot.

REMARK.

When the first vinegar is poured off, fresh may be put on at the pleasure of the operator.

LAPIS MEDICAMENTOSUS,

The MEDICINAL STONE.

Take alum, litharge, bole armenic or French bole, of each half a pound; of the colcothar of green vitriol three ounces; of vinegar a quarter of a pint. Dry the whole mixt together over a fire, till it grows hard.

STANNUM PULVERATUM,

POWERED TIN.

Let melted tin be poured into a wooden box chalked within, and while the tin grows cold, let the box be briskly shaken, and part of the tin will be reduced to powder. The remainder, by being treated in the same way, may also be reduced to powder.

REMARK.

REMARK.

The process succeeds upon this property in the tin, that there is an intermediate state between its being fluid, and the parts adhering tenaciously, so as to bear the hammer. In this state the parts are by the force of this agitation beat asunder: but the whole tin cannot be pulverized at one operation, because this state of the tin remains but a very short time. This operation the metallurgists call granulating the metals; but as they give that name to other processes also, it is here called by a name more familiar to the apothecaries.

ARGENTIVIVI PURIFICATIO,

The PURIFICATION of QUICKSILVER.

Distill the quicksilver in a retort, and then wash it well with water and salt, or vinegar.

REMARK.

There are other methods, but more operose, which are supposed to perform this purification rather more perfectly. Distilling the quicksilver from cinnabar (the process

cess for making which hereafter follows) mixt with lime or filings of iron, is most esteemed. But this here described is more easily performed, and yet will render the quicksilver tolerably pure from foreign mixtures

A U R U M M U S I V U M,

M O S A I C G O L D.

Take of tin one pound; of flowers of sulphur seven ounces; sal ammoniac, purified quicksilver of each half a pound. Add the quicksilver to the tin melted; when the mixture is cold, reduce it to powder, mix well with it the sulphur and sal ammoniac, and sublime the compound in a matras. The mosaic gold will be found under the part sublimed with a small quantity of foulness at the bottom.

R E M A R K.

The change in the name of this preparation from *aurum mosaicum* to *aurum musivum* is only done, because this latter is the most ancient form of the word. *Caneparius*, who describes it as a pigment, calls it *aurum musaicum*,

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musaicum, and also *purpurina* *. The materials are here better proportioned than in the original of *Caneparius*, who directs them in equal quantities, though that rule has been most commonly followed.

ÆTHIOPS MINERALIS,

ÆTHIOPS MINERAL.

Take equal parts of quicksilver purified, and of flowers of sulphur unwashed. Rub them together in a mortar of glass or marble, till the quicksilver perfectly disappears, and the union is perfected.

REMARK.

If the mortar be a little warm, the operation will be the sooner finished. As for this process it is not necessary to wash the flowers of brimstone; so the progress of the operation is retarded by it.

CINNABARIS FACTITIA,

ARTIFICIAL CINNABAR.

Take of purified quicksilver twenty-five ounces, of sulphur seven ounces; stir the

* *De atramentis, Descript. V. c. 21.*

quicksilver-

quicksilver into the sulphur melted, and if the mixture takes fire, it is to be extinguished by covering the vessel. Then let the matter be reduced to powder, and sublimed.

R E M A R K.

This is called artificial cinnabar, to distinguish it from another, which is naturally produced in the earth, and is one of the ores, from which quicksilver is obtained. The proportion here set down is a little different, and preferable to that usually given in the generality of books, where the quicksilver is directed only triple the weight of the sulphur.

MERCURIUS CORROSIVUS
SUBLIMATUS,

vel

A L B U S ;

CORROSIVE MERCURY SUBLIMATE,

OR

WHITE CORROSIVE MERCURY.

Take of purified quicksilver forty ounces,
of sea salt thirty three ounces, of nitre
twenty-eight ounces, of calcined green vi-
triol

P R E P A R A T I O N S. 221

triol sixty-six ounces. Rub the quicksilver first with about an ounce or more of corrosive sublimate in a wooden or stone vessel, till it break into small grains; then mix it with the nitre, afterwards with the sea salt, till the quicksilver quite disappears; lastly add the calcined vitriol, but do not rub the mixture too long with it, lest the quicksilver should begin to part again. Sublime the mixture in a matras, to which may be fitted an alembic head, that a spirit, which will ascend in a small quantity, may be saved.

R E M A R K.

As it is the general practice, and the most commodious way for mixing the materials to break the quicksilver first with a little sublimate, the process is here so described*. If it should chance that the operator cannot procure any sublimate ready made, he may learn other ways for making some out of the common books of chemistry, and therefore it was not necessary to provide for so particular a case here.

* See the Narrative of the committee, p. 61, 62.

MER-

MERCURIUS DULCIS
SUBLIMATUS,

DULCIFIED MERCURY SUBLIMATE.

Take of corrosive sublimate one pound, of purified quicksilver nine ounces. Add the quicksilver to the sublimate reduced to powder, and in a glass matras digest them together in a gentle sand heat, often shaking the glass, till they are united. Then augmenting the heat, sublime the mixture. After an acrid part on the top of the sublimation is scraped off, and if any globules of quicksilver chance to appear, they likewise being separated, the mass sublimed is to be reduced to powder, and sublimed again : the sublimation is to be six times repeated.

R E M A R K.

The method of mixing the materials by digestion saves the operator a very hurtful labour in rubbing them together, the dust which rises, being very pernicious ; and if the digestion be carefully performed, the materials will be sufficiently united. If the mixture before sublimation is imperfect, it occasions a loss : for the sublimate, when
united

united to the additional quicksilver, rises with more difficulty than by itself. So that what is not well united ascends first, and is found at the top of the rest, and ought to be thrown away. When this is done, if any quicksilver should appear in globules, they are best removed; for it can scarce be united with the rest.

MERCURIUS CALCINATUS, CALCINED QUICKSILVER.

Set quicksilver purified upon a sand heat for several months in a glass vessel of a broad bottom, and opening to the air by a small hole, till it is reduced to a red powder.

REMARK.

The quicksilver must have a communication with the air, which is necessary in calcining all metals. This opening is best made, not as in common bolt heads, but at the lower end of a stem going into the body of the glass, that the quicksilver, if it rise with the heat, may not by ascending into the stem, be removed out of the heat that should calcine it.

MER-

MERCURIUS
PRÆCIPITATUS ALBUS,
WHITE PRECIPITATE of MERCURY.

Take of sal ammoniac, and of corrosive sublimate, equal weights. Dissolve them together in water, filtre the solution through paper, and with a solution of some alkaline fixt salt make a precipitation; then wash off all acrimony from the precipitated powder.

R E M A R K.

The committee in their first draught proposed also the more ancient method of making this preparation by precipitating a solution of quicksilver in aqua fortis by sea salt; but this process here retained is more easily performed.

MERCURIUS CORROSIVUS
RUBER,

The MERCURIAL RED CORROSIVE.

Take of quicksilver purified, and of the compound aqua fortis, equal weights. Set them together in a glass of a flat bottom
upon

upon a sand heat, till all humidity is exhaled, and the dry mass has acquired a red colour.

REMARK.

This preparation has been commonly called *mercurius præcipitatus ruber*. Why the name is now changed see the Narrative of the committee, p. 63.

The process in books is directed with simple spirit of nitre, and is so made at present by some of our chemists, who attempt to prepare it; but the surgeons find this unfit for their purpose, and use what is imported from abroad *.

MERCURIUS CORALLINUS, CORALLINE MERCURY.

Pour upon the mercurial red corrosive thrice its weight of rectified spirit of wine, and digest them together two or three days in a gentle heat, often shaking the vessel: then set fire to the spirit, stirring the powder continually till the spirit is quite burnt away.

* See the Narrative of the committee, p. 55, 56.

REMARK.

This operation proceeds upon the principle of spirit of wine dulcifying acid spirits.

The medicine is commonly known by the name of *arcanum corallinum*. What was understood by the term *arcanum* the committee have explained in their Narrative, p. 63.

MERCURIUS EMETICUS
FLAVUS,

The YELLOW MERCURIAL EMETIC.

Pour upon purified quicksilver in a glass vessel double its weight of the strong spirit of vitriol. Let the liquor heat gradually, and then boil, till in the bottom of the glass there remains a white mass, which is to be perfectly dried with a strong heat. This upon the affusion of warm water will turn yellow, and fall into powder. Rub this powder, and the warm water diligently together in a glass mortar. Then when the powder is subsided, pour off this water, and wash the powder often with fresh water, till it is become perfectly free from all acrimony.

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REMARK.

Why the usual name of this preparation, *turpethum minerale*, turbith mineral, is here changed see the Narrative of the committee, p. 63, 64.

If too little oil of vitriol is used, the quicksilver will not all be dissolved. The better the mass is dried, and all the acid spirit, which the fire will separate from it, expelled out; the less quicksilver will be washed away, and the greater quantity of turbith be obtained.

SULPHUR ANTIMONII PRÆCIPITATUM.

The PRECIPITATED SULPHUR
of ANTIMONY.

Take of antimony sixteen ounces, of tartar a pound, of nitre half a pound. Being separately reduced to powder, mix them well, and throw them by degrees into a crucible red hot, and melt the mixture with a strong fire; then pour it out into a conical mould, that the metallic part, commonly called the regulus of antimony, may fall to the bottom, while the scoriæ float

at top. Dissolve these scorix in water, and filtre the solution through paper ; then precipitate the sulphur by dropping in spirit of sea salt, and afterwards wash it with water from the salts adhering.

R E M A R K.

This process is constantly by authors divided into two, the regulus being a useful preparation ; by mixing this regulus with pure tin is pewter made. But as this metallic substance is not used now by us in medicine, both processes are here joined. The intention of the latter is to obtain the precipitated substance after the regulus has been in a good measure separated from the antimony. For what is peculiar in the description here given of this second part of the process see the Narrative of the committee, p. 59.

C R O C U S A N T I M O N I I,

C R O C U S of A N T I M O N Y.

Take of antimony and nitre equal weights. Being separately reduced to powder, let them be well mixt, and then gradually thrown into a hot crucible, to melt ; the matter being poured out is to be separated

rated from its scorixæ. It will not always appear of the same colour; it is the more yellow, the longer it has been melted.

REMARK.

This preparation has been commonly called *crocus metallorum* *. It is used by the farriers in great quantities for horses. And our chemists have gradually retrenched the nitre, at first by using no more than about two thirds of the quantity here directed, and at length one half only. They likewise spare the charge of crucibles by setting the mixture on fire with a live coal, and giving it no farther melting, than what it will have by its own heat, or by adding a little sea-salt, which makes it flow more readily. It were to be wished, these practices had not taken place in this preparation, when designed for men, without the privity of physicians; that in a medicine used only in few cases it, might be better known, now far these methods are to be approved †.

* See the Narrative of the committee, p. 64.

† See the Narrative of the committee, p. 60.

CROCUS ANTIMONII LOTUS,
WASHED CROCUS of ANTIMONY.

Boil the crocus of antimony, reduced to a very fine powder in water ; and this water being poured away, wash the powder often with hot water, till the water comes off insipid.

R E M A R K.

The reason for this process see in the Narrative of the committee, p. 60.

TARTARUM EMETICUM,
E M E T I C T A R T A R.

Take washed crocus of antimony, crystals of tartar, of each half a pound; of water three pints. Boil them together for half an hour, then filtre the water through paper, and after a due evaporation set it by, that the salt may crystallize.

CALX ANTIMONII,
The C A L X of A N T I M O N Y.

Let antimony in powder be well mixed with thrice its weight of nitre, and thrown by degrees into a crucible moderately heated.

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ed. Then being removed from the fire, let it be washed in water, both from the adhering salts, and from what coarser parts may have been less perfectly calcined than the rest.

REMARK.

Why the old name of *antimonium diaphoreticum* is here changed see the Narrative of the committee, p. 64.

The first washing is performed by putting the calx from the crucible into water, that the salt remaining with it may be dissolved. When the undissolved part is settled, this water is to be poured off, and fresh water put on: and when the washing has been repeated, till the water comes away tasteless, then to separate the grosser parts from the rest, water is to be poured on, and decanted again, while turbid, that it may carry along with it the more subtile parts, while the grosser are left behind.

CAUSTICUM ANTIMONIALE,

The ANTIMONIAL CAUSTIC.

Take of antimony one pound, of corrosive sublimate two pounds, being reduced separately into powder, mix them well, and distill them in a retort with a wide

P 4

neck

232 METALLIC PREP.

neck in a gentle heat of sand. Let what ascends into the neck of the retort be exposed to the air, that it may run into a liquor.

REMARK.

It is no improper caution to provide a retort with a wide neck, and especially not to leave it with too streight a mouth; for, as what ascends congeals in the neck of the glass, if the neck should be stoppt up the glass would burst and send out a very pernicious fume.

This congealed substance is usually called the butter, and, when liquified, the oil of antimony: but the committee of the college for reviewing the pharmacopœia chose to give the preparation another name. See their narrative, p. 4.

CINNABARIS ANTIMONII,
CINNABAR of ANTIMONY.

Sublime the remains of the former process in a coated bolt-head with an open fire.

REMARK.

As the bolthead is to be exposed to a naked fire, it must be defended from the immediate action of the fire with a coat of loam.

AQUÆ

AQUÆ STILLATITIÆ SIMPLICES,

SIMPLE DISTILLED WATERS.

AQUA ALEXETERIA SIMPLEX,

SIMPLE ALEXETERIAL WATER.

Take of the green leaves of spear-mint a pound and a half; the tops of sea-worm-wood likewise green, the green leaves of angelica, of each a pound; of water as much as is sufficient to prevent burning. Distill off three gallons.

REMARK.

This water is here contracted by retaining in it only the most eligible part of its former ingredients, which are endeavoured to be so adjusted, that no one may predominate. The plants are here ordered green, the flavour of such being most delicate, and the water generally so prepared by those, who make it in the greatest quantities.

AQUA

234 SIMPLE DISTILLED

AQUA SEMINUM ANETHI,
WATER of DILL SEED.

Take of dill seed one pound, of water as much as is sufficient to prevent burning. Distill off a gallon.

AQUA CORTICUM
AURANTIORUM SIMPLEX,

The SIMPLE DISTILLED WATER
of ORANGE-PEEL.

Take of the outer yellow rind of fresh Seville oranges four ounces, of water as much as is sufficient to prevent burning. Distill off a gallon.

REMARK.

Lemon-peel also affords a water of a very pleasant flavour; but as this peel loses all its flavour in drying, so this water will be more perishable than that from orange-peel.

AQUA

AQUA CASTOREI,

WATER of CASTOR.

Take of Russia castor one ounce, of water as much as is sufficient to prevent burning. Distill off a quart.

AQUA CINNAMOMI SIMPLEX,

SIMPLE CINNAMON WATER.

Take of cinnamon one pound, of water as much as is sufficient to prevent burning. Distill off a gallon.

AQUA FOENICULI,

FENNEL WATER.

Take of the seeds of sweet fennel a pound, of water as much as is sufficient to prevent burning. Distill off a gallon.

AQUA MENTHÆ

PIPERITIDIS SIMPLEX,

SIMPLE PEPPER-MINT WATER.

Take of the leaves of pepper mint dried a pound and a half, of water as much as
is

36 SIMPLE DISTILLED

is sufficient to prevent burning. Distill off a gallon.

AQUA MENTHÆ
VULGARIS SIMPLEX,
SIMPLE SPEAR-MINT WATER.

Take of the leaves of spear-mint dried a pound and an half, of water as much as is sufficient to prevent burning. Distill off a gallon.

AQUA PIPERIS JAMAICENSIS,
WATER of JAMAICA PEPPER.

Take of Jamaica pepper half a pound, of water as much as is sufficient to prevent burning. Distill off a gallon.

AQUA PULEGII SIMPLEX,
SIMPLE PENNYROYAL WATER.

Take of the leaves of pennyroyal dried a pound and a half, of water as much as is sufficient to prevent burning. Distill off a gallon.

AQUA

AQUA ROSARUM
DAMASCENARUM,

DAMASK-ROSE WATER.

Take of fresh Damask-roses six pounds,
of water as much as is sufficient to prevent
burning. Distill off a gallon.

NOTE.

That all these waters may keep the
longer, about a twentieth part of proof spi-
rit may be added to them, after they are
distilled.

Both these, and the spirituous waters,
which follow, are usually distilled in the
same sort of vessels as the essential oils
above described.

The herbs, if they are of prime goodness,
are to be taken in the weights here directed
for each. Where green are prescribed, such
are to be used. But in some of the waters
dry herbs are allowed, because they are
to be had at all times of the year, though
green plants afford rather the more elegant
waters. But the weights here directed
should

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should be varied by the judgment of the operator, not only when green are used instead of dry, but whenever the plants by a less favourable season are weaker in flavour.

AQUÆ

A Q U Æ
 STILLATITÆ SPIRITUOSÆ,
 et
 SPIRITUS;

SPIRITUOUS DISTILLED WATERS,
 and SPIRITS.

AQUA ALEXETERIA
 SPIRITUOSA,

SPIRITUOUS ALEXETERIAL
 WATER.

Take of the green leaves of spear-mint
 half a pound; the leaves of angelica green,
 the tops of sea-wormwood green, of each
 four ounces; of proof spirit one gallon;
 of water as much as is sufficient to prevent
 burning. Distill off one gallon.

AQUA

240 SPIRITUOUS DISTILLED

AQUA ALEXETERIA
SPIRITUOSA cum ACETO,
SPIRITUOSUS ALEXETERIAL
WATER with VINEGAR.

Take the green leaves of spear-mint, the leaves of angelica likewise green, of each half a pound ; of the tops of sea-wormwood green four ounces ; of proof spirit one gallon ; of water as much as is sufficient to prevent burning. Distill off one gallon, and then add one pint of vinegar.

REMARK.

The committee proposed compounding this spirituous alexeterial water, with vinegar, in imitation of the *aqua theriacalis* *. But the college have chose to add also the preceding water, that the composition may be prescribed either with vinegar, or without, as the case may require.

AQUA SEMINUM ANISI
COMPOSITA,
COMPOUND ANISEED WATER.

Take aniseeds, and angelica seeds, of each half a pound ; of proof spirit a gallon ; of

* See the Narrative of the committee, p. 74.

WATERS, AND SPIRITS. 241

water as much as is sufficient to prevent burning. Distill off a gallon.

AQUA CORTICUM AURANTIORUM SPIRITUOSA, The SPIRITUOUS WATER of ORANGE-PEEL.

Take of the outer yellow rind of fresh Seville oranges half a pound, of proof spirit a gallon, of water as much as is sufficient to avoid burning. Distill off a gallon.

AQUA SEMINUM CARDAMMOI, WATER of CARDAMOM SEEDS.

Take of the lesser cardamom seeds husked four ounces, of proof spirit a gallon, of water as much as is sufficient to prevent burning. Distill off a gallon.

AQUA SEMINUM CARUI, WATER of CARRAWAY SEEDS.

Take of carraway seeds half a pound, of proof spirit a gallon, of water as much

as is sufficient to prevent burning. Distill off a gallon.

AQUA CINNAMOMI
SPIRITUOSA,

SPIRITUOUS CINNAMON WATER.

Take of cinnamon a pound, of proof spirit a gallon, of water as much as is sufficient to prevent burning. Distill off a gallon.

AQUA JUNIPERI
COMPOSITA,

COMPOUND JUNIPER WATER.

Take of juniper berries a pound; carraway seeds, sweet fennel seed, of each an ounce and a half; of proof spirit a gallon; of water as much as is sufficient to prevent burning. Distill off a gallon.

AQUA MENTHÆ
PIPERITIDIS SPIRITUOSA,

The SPIRITUOUS WATER of
PEPPER-MINT.

Take of the leaves of pepper-mint dried a pound and a half, of proof spirit a gallon,
of

WATERS, AND SPIRITS. 243

of water as much as is sufficient to prevent burning. Distill off a gallon.

AQUA MENTHÆ
VULGARIS SPIRITUOSA,
SPIRITUOUS SPEAR-MINT
WATER.

Take of the leaves of spear-mint dried a pound and a half, of proof spirit a gallon, of water as much as is sufficient to prevent burning. Distill off a gallon.

AQUA NUCIS MOSCHATÆ,
NUTMEG WATER.

Take of nutmeg two ounces, of proof spirit a gallon, of water as much as is sufficient to prevent burning. Distill off a gallon.

AQUA PULEGII
SPIRITUOSA,
SPIRITUOUS PENNYROYAL
WATER.

Take of the leaves of pennyroyal dried a pound and a half, of proof spirit a gallon,
Q 2 of

of water as much as is sufficient to prevent burning. Distill off a gallon.

AQUA RAPHANI
COMPOSITA,

COMPOUND WATER of HORSE-
RADISH.

Take of the fresh leaves of garden scurvy-grass four pounds; fresh horse-radish root, the outeryellow rind of fresh Seville oranges, of each two pound; of nutmeg nine ounces; of proof spirit two gallons; of water as much as is sufficient to prevent burning. Distill off two gallons.

SPIRITUS LAVENDULÆ
SIMPLEX,

SIMPLE SPIRIT of LAVENDER,

Take of fresh lavender flowers a pound and a half, of proof spirit a gallon. Distill off in a water balneum five pints.

SPIRITUS

WATERS, AND SPIRITS. 245

SPIRITUS RORISMARINI,

SPIRIT of ROSEMARY.

Take of fresh rosemary tops a pound and a half, of proof spirit a gallon. Distill off in a water balneum five pints.

SPIRITUS LAVENDULÆ
COMPOSITUS,

COMPOUND SPIRIT of LAVENDER.

Take of simple spirit of lavender three pints; of spirit of rosemary one pint; cinnamon, nutmeg, of each half an ounce; of red sanders three drams. Digest them together, and then strain off the spirits.

GENERAL REMARK.

The committee of the college have expressed themselves so largely upon these waters, and have explained so fully the reasons that induced them to make so great an alteration in this head, as they have done, that nothing more need be said upon the particulars. The design in directing

Q 3

here

246 SPIRITUOUS DISTILLED &c.

here so many of the simple and spirituous waters with the same ingredients is, that those who prefer simplicity, may more easily compose draughts and juleps without too great a diversity of flavours,

DECOCTA

DECOCTA et INFUSA,
DECOCTIONS and INFUSIONS.

DECOCTUM ALBUM,
The WHITE DECOCTION.

Take of burnt hartshorn prepared two ounces, of gum Arabic two drams, of water three pints. Boil the water away to a quart, and strain it off.

REMARK.

The original in *Bate's* pharmacopœia contains no gum Arabic; but without it the hartshorn will scarce be kept suspended.

DECOCTUM COMMUNE
pro
CLYSTERE,

The COMMON DECOCTION for
GLYSTERS.

Take of mallow leaves dry, one ounce,
dried chamomile flowers, sweet fennel seeds,

Q 4

of

248 DECOCTIONS

of each half an ounce, of water one pint.
After boiling strain it off.

REMARK.

The reasons for retrenching the former ridiculous luxuriancy in this decoction are too evident to need particular explanation.

DECOCTUM PECTORALE,

PECTORAL DECOCTION

Take common barley, raisins stoned, figs, of each two ounces; of liquorice root half an ounce; of water two quarts. Boil the water first with the barley, then add the raisins, and afterwards towards the latter end of the decoction the figs and liquorice; the decoction being fully ended, when one quart only of liquor will be left after straining.

REMARK.

This decoction was substituted by the committee in their first draught in the place of that in the former pharmacopœia under the same title, that being compounded of many very disagreeable ingredients,

as

as appeared by examining each separately; nor is this in any degree less efficacious.

AQUA HORDEATA,

BARLEY WATER.

Take of pearl barley two ounces, of water two quarts. Wash the barley first well with some cold water; then pouring on about half a pint of water boil it a little while; and this water, which will be coloured, being thrown away, put the barley into the quantity of water above directed first made boiling hot, and boil away to half.

REMARK.

Though this is oftneft prepared by servants, who attend on the sick, yet as it is used by sick persons in great quantities, where it is of consequence, that it should be prepared after the best manner, and as it is not unfrequently mentioned in physicians prescriptions; it was thought not improper to insert this article here, with a detail of those circumstances, which, if omitted, would render the decoction less elegant and grateful.

FOTUS

FOTUS COMMUNIS,

The COMMON FOMENTATION.

Take the leaves of southern-wood, or of lavender-cotton dry, the tops of sea worm-wood also dry, dried chamomile flowers, of each one ounce ; of bay leaves dry half an ounce ; of water three quarts. After a light boiling strain the water off.

REMARK.

It is usual in many cases to add a portion of spirit of wine to this fomentation ; but it has been thought proper to leave the quantity of this to the choice of the prescriber, as the case may be judged to require.

JUS VIPERINUM,

VIPER BROTH.

Take a viper of a middle size without the skin, head, or entrails ; of water a quart. Boil to about a pint and a half ; remove all from the fire, and when the water is cold, if the viper be a not dried one,

one, take away the congealed fat. Then take a chicken of a middle size drawn, and the skin with all the fat taken off, and put it whole into this decoction while cold, set it upon the fire till it boils; then remove it from the fire, take out the chicken, cut the flesh of it into small pieces, which put again into the water, and set it over the fire; but, as soon as it begins to boil up, pour it off, first having taken away whatever scum may have risen.

REMARK.

It is usual to boil the viper for a long time; but whereas the chicken is added chiefly to render the broth more grateful, so long boiling of the chicken would dispel all grateful flavour from the broth, and render it insipid, if not very disagreeable. By the method here directed all the advantage, that can be had from the chicken, will be obtained. Indeed this method ought no less to be observed in making all chicken broth: any one circumstance omitted will render the broth less perfect.

MUCILAGO

MUCILLAGO SEMINUM
CYDONIORUM,

MUCILAGE of QUINCE SEED.

Take of Quince seed a dram, of water six ounces. Boil with a gentle fire, till the water grows roapy resembling the white of an egg; then strain it through a linen cloth.

SERUM ALUMINOSUM,

ALUM WHEY.

Take of cow's milk one pint, of alum in powder two drams. Boil, till a whey is formed, which is to be well separated from the curd.

SERUM SCORBUTICUM,

SCORBUTIC WHEY.

Take of cow's milk one pint, of the scorbutic juices a quarter of a pint. Boil till a whey is formed, which is to be well separated from the curd.

INFUSUM

INFUSUM AMARUM
SIMPLEX,

The SIMPLE BITTER INFUSION.

Take gentian root, the yellow rind of lemon peel fresh carefully separated from the inner white part, of each half an ounce, of the yellow rind of Seville-orange peel also carefully separated from its inner white part, but dried, a dram and a half, of boiling water three quarters of a pint. After infusing for an hour or two strain it, either through paper, or a cloth without any pressing out.

REMARK.

The lemon peel is of singular use here to give the infusion a grateful flavour*; but must for this purpose be used fresh, when dry it is of little or no service: there is scarce any time of the year, in which it cannot be procured fresh, though lemons are not always equally plentiful. The orange peel is best used dry, in which the heat attending this peel, when fresh, is abated.

* See the Narrative of the committee, p. 78, 79.

INFUSUM AMARUM
PURGANS,

The PURGING BITTER INFUSION.

Take the leaves of fena, the yellow rind of fresh lemon peel, of each three drams; gentian root, the yellow part of Seville-orange peel dried, the lesser cardamom seeds husked, of each half a dram; of boiling water five ounces. After infusing, till the liquor is cold, strain it off.

REMARK.

Lemon peel affords one of the best flavours for correcting the offensive taste of fena, as well as for improving bitters.

INFUSUM SENÆ COMMUNE,

The COMMON INFUSION of SENA.

Take the leaves of fena an ounce and a half, of crystals of tartar three drams, of the lesser cardamom seeds husked two drams, of water one pint. Boil the crystals of tartar in water, till they are dissolved, then pour the water, while boiling
hot,

AND INFUSIONS. 255

hot, upon the senna and the rest. When the liquor is cold, strain it off.

INFUSUM SENÆ
LIMONIATUM.

The INFUSION of SENNA with
LEMON.

Take of the leaves of senna one ounce and a half, of the yellow of fresh lemon peel an ounce in weight, of lemon juice an ounce in measure, of boiling water one pint. Infuse till cold and then strain.

REMARK.

See the observations of the committee on these two infusions of senna, in their Narrative, p. 79.

AQUA CALCIS SIMPLEX,
SIMPLE LIME-WATER.

Take of quick lime one pound, of water, a gallon and a half. Pour the water on gradually; and after the ebullition is over, let the lime subside, and the liquor be filtered through paper.

REMARK.

REMARK.

The lime, we have here in London, is made of chalk. In countries where stone lime is used, a less quantity would suffice.

AQUA CALCIS MINUS
COMPOSITA,

The LESS COMPOUND LIME-
WATER,

Take of liquorice one ounce, of saffra-
fras bark half an ounce, of simple lime-
water three quarts. Infuse two days without
heat, and then strain off the liquor.

AQUA CALCIS MAGIS
COMPOSITA,

The MORE COMPOUND LIME-
WATER.

Take of the raspings of lignum vitæ half
a pound, of liquorice one ounce, of saffra-
fras bark half an ounce, of coriander seed three
drams, of simple lime-water three quarts.
Infuse as before, and then strain off.

AND INFUSIONS. 257

REMARK.

In the preceding infusion, the principal effect is taking off the ill flavour of the lime-water; but here from this quantity of *lignum vitæ* the liquor receives a considerable additional tincture.

TINCTURA ROSARUM,

TINCTURE of ROSES.

Take of red rose buds, the white heels being cut off, half an ounce, of the strong spirit of vitriol, called the oil, one scruple, of boiling water two pints and a half, of double refined sugar an ounce and a half. First add the spirit of vitriol to the water in a vessel of glass or earth glazed, and then infuse the roses; strain the liquor when cold, and add the sugar.

REMARK.

Some chuse to make the infusion, before they put in the acid; but in this little quantity it is indifferent *.

* See the Narrative of the committee, p. 80.

ACETUM SCILLITICUM,

VINEGAR of SQUILLS.

Take of dried squills one pound, of vinegar three quarts. Infuse the squills in the vinegar with a small heat, then press it out, and set it by, till the dregs are subsided; afterwards to the depurated vinegar add about a twelfth part of proof spirit, that it may be preserved from contracting dregs by time.

REMARK.

The former pharmacopœia had a general head under the title of *Aceta medicata*, which contained only two particulars; but the first, being the distillation of vinegar, is now removed among the other distillations of acid spirits; and this, which was the other, being a preparation by infusion, comes not improperly under this title.

VINA,

V I N A

W I N E S.

VINUM ALOETICUM
ALKALINUM,

ALOETIC ALKALINE WINE.

Take of any fixt alkaline salt eight ounces, Socotorine aloes, saffron, myrrh, of each one ounce; of purified sal ammoniac six drams; of white wine a quart. Infuse them together without heat for a week, or longer. Then filtre the wine through paper.

REMARK.

The alkaline salt is here in part dulcified by the acid of the wine. But its alkaline quality in some measure remains, insomuch that it sets loose the volatile part of the sal ammoniac, as may be perceived by the smell.

R 2

VINUM

VINUM AMARUM,

BITTER WINE.

Take gentian root, the yellow part of fresh lemon peel, of each one ounce, of long pepper two drams, of white wine a quart. Infuse without heat, and strain.

REMARK.

On this preparation see the observations of the committee in the Narrative, p. 82.

VINUM ANTIMONIALE,

ANTIMONIAL WINE.

Take of the crocus of antimony washed one ounce, of white wine a pint and a half. Infuse without heat, and then strain the wine off through paper.

REMARK.

The straining through paper is here a necessary circumstance, that no part of the antimony may be left floating in the wine, and be given in substance, when a tincture of it only is intended.

VINUM

VINUM CHALYBEATUM,

CHALYBEATE WINE.

Take of filings of iron four ounces ; cinnamon, and mace, of each half an ounce ; of Rhenish wine two quarts. Infuse a month without heat, often stirring : then strain it off.

REMARK.

Here the spices are substituted in the room of the saffron of the former pharmacopœia with the design of rendering the medicine more grateful.

VINUM CROCEUM

SAFFRON WINE.

Take of Saffron one ounce, of Canary one pint. Infuse without heat, and strain.

VINUM IPECACOANHÆ,

WINE with IPECACOANHÆ.

Take of the root ipecacoanha two ounces, of the yellow part of Seville orange-peel

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dried

dried half an ounce; of Canary a quart.
Infuse without heat, and strain.

VINUM VIPERINUM,

VIPER WINE.

Take of dried vipers two ounces, of white wine three pints. Infuse with a gentle heat for a week, and then strain the wine off.

REMARK.

The committee proposed this medicine in their plan, with living vipers and intire. But this form is chosen by the college, as prepared in less time.

TINCTURA RHABARBARI

VINOSA,

TINCTURE of RHUBARB in WINE.

Take of rhubarb two ounces, of the lesser cardamom seeds husked half an ounce, of saffron two drams, of white wine a quart. Infuse three days without heat, and strain.

T I N C -

TINCTURA SACRA,

TINCTURA SACRA,

Take of Socotorine aloes eight ounces, of Winter's bark, so called, two ounces, of white wine five quarts. Pulverize the aloes and bark separately, then mix them and pour on the wine; infuse for a week or longer without heat, the glass being often shook, and lastly strain the wine off.

It is convenient to mix some clean white sand with the powders, that the aloes, when it becomes moist, may not cling into a lump.

REMARK.

On this medicine see the Narrative of the committee, p. 82, 83.

TINCTURA THEBAICA,

THEBAIC TINCTURE.

Take of opium strained two ounces; cinnamon, cloves, of each a dram; of white wine a pint. Infuse without heat for a week; and then strain off the wine through paper.

R 4

REMARK.

REMARK.

Upon this tincture see the Narrative of the committee, p. 81.

NOTE.

To all these wines, after they are strained, may be added about a twentieth part of proof spirit, by which they will be the better secured from fretting. It is also most convenient to keep them in small wine bottles, and corked as carefully, as wine usually is.

T I N C T U -

T I N C T U R Æ
S P I R I T U O S Æ,

SPIRITUOUS TINCTURES.

TINCTURA AMARA,

The BITTER TINCTURE.

Take of gentian root two ounces, of the outer yellow rind of Seville orange-peel dried one ounce, of the lesser cardamom seeds husked half an ounce, of proof spirit a quart. Digest without heat, and then strain.

REMARK.

This tincture is of similar virtues with the watry bitter infusion; but the particular intention in this is to provide a medicine, that may be kept any length of time, and carried to any distance. See the reasons for the difference in the ingredients between this and the other in the Narrative of the committee, p. 84.

T I N C T U -

TINCTURA ANTIMONII,

TINCTURE OF ANTIMONY.

Take of any fixt alkaline salt a pound, of antimony half a pound, of rectified spirit of wine a quart. Mix the antimony reduced to powder with the salt, and melt them together for an hour in a strong fire; then pour all out, and being pulverized, pour on the spirit of wine, digest for three or four days, and afterwards strain off.

REMARK.

The tincture of salt of tartar is scarce made with us without adding antimony, as is observed in the Narrative of the committee, p. 85.

TINCTURA AROMATICA,

AROMATIC TINCTURE.

Take of cinnamon six drams; of the lesser cardamom seeds hulked three drams; long pepper, ginger, of each two drams; of proof spirit a quart: digest without heat, and strain the spirit off.

REMARK.

REMARK.

This and all tinctures with aromatics are hurt by the use of heat, which must dissipate great part of the volatile flavour of such substances.

TINCTURA CANTHARIDUM,

TINCTURE of CANTHARIDES.

Take of cantharides bruised two drams, of cochineal half a dram, of proof spirit a pint and a half. After digestion filtre the spirit through paper.

REMARK.

The other ingredients, with which this tincture was charged in the late pharmacopœia, are here omitted, as inefficacious, considering the small dose, in which this tincture must be given*: the cochineal is retained for the colour it will give the preparation.

* See the Narrative of the committee, p. 84, 85.

TINCTURA CARDAMOMI,

TINCTURE of CARDAMOM SEEDS.

Take of the lesser cardamom seeds freed from their husks half a pound, of proof spirit a quart. Digest without heat, and strain off the spirit.

TINCTURA CASTOREI,

TINCTURE of CASTOR.

Take of Russia castor powdered two ounces, of proof spirit a quart. Digest for ten days without heat, and then strain the spirit off.

REMARK.

Here simple spirit is made use of instead of the spirit of castor in the last dispensatory, that not being received in this.

TINC.

TINCTURA CINNAMOMI,
TINCTURE of CINNAMON.

Take of cinnamon an ounce and a half,
of proof spirit a pint. Digest without heat,
and strain the spirit off.

TINCTURA CORTICIS PE-
RUVIANI SIMPLEX,

The SIMPLE TINCTURE of the PERUVIAN
BARK.

Take of the Peruvian bark four ounces,
of proof spirit a quart. After digestion strain
the spirit off.

TINCTURA CORTICIS PE-
RUVIANI VOLATILIS,
VOLATILE TINCTURE of the PE-
RUVIAN BARK.

Take of the Peruvian Bark four ounces,
of spirit of sal ammoniac a quart. Digest
without heat in a close vessel, and then
strain the spirit off.

REMARK.

The spirit of sal ammoniac here meant, is that described above in this book, prepared with water by an alkaline salt.

TINCTURA FOETIDA,

The FETID TINCTURE.

Take of asa foetida four ounces, of rectified spirit of wine a quart. After digestion strain the spirit off.

TINCTURA FULIGINIS,

TINCTURE of SOOT.

Take of wood-soot two ounces, of asa foetida one ounce, of proof spirit a quart. After digestion strain the spirit off.

TINCTURA GUAIACINA
VOLATILIS,

VOLATILE TINCTURE of GUM
GUAIACUM.

Take of gum guaiacum four ounces, of the aromatic volatile spirit a pint and a half.
Digest

TINCTURES. 271

Digest without heat in a well closed vessel, and then strain the spirit off.

TINCTURA JALAPII,

TINCTURE of JALAP.

Take of the root of Jalap eight ounces, of proof spirit a quart. After digestion strain off the spirit.

TINCTURA JAPONICA,

TINCTURE of JAPON EARTH.

Take of Japon earth three ounces, of cinnamon two ounces, of proof spirit a quart. After digestion strain the spirit off.

TINCTURA FLORUM MARTIALIUM,

TINCTURE of MARTIAL FLOWERS.

Take of martial flowers four ounces, of proof spirit a pint. After digestion strain the spirit off.

REMARK.

REMARK.

The former pharmacopœia had also another tincture from the bottom left after the sublimation of these flowers; in imitation of which our chemists substituted a compendium described in the first draught presented by the committee to the college. And this was almost alone kept in the shops, and used, whenever the tincture of the flowers was prescribed. Why this is not here received, the committee explain in their Narrative, p. 87, 88.

TINCTURA MARTIS

in

SPIRITU SALIS,

TINCTURE of IRON in SPIRIT of
SALT.

Take of the filings of iron half a pound, of Glauber's spirit of sea salt three pounds, of rectified spirit of wine three pints. Digest the filings in the spirit of salt without heat, as long as the spirit will work on them: then, after the fæces have subsided evaporate the liquor poured off clear
to

to one pound, and to this add the spirit of wine.

TINCTURA MELAMPODII,
TINCTURE of BLACK HELLEBORE.

Take of the root of black hellebore four ounces, of cochineal two scruples, of proof spirit a quart. After digestion filtre through paper.

TINCTURA MYRRHÆ,
TINCTURE of MYRRH.

Take of myrrh three ounces, of proof spirit a quart. Digest them together, and then strain the spirit off.

REMARK.

Here see the Narrative of the committee, p. 86, 87.

TINCTURA RHABARBARI
SPIRITUOSA,

TINCTURE of RHUBARB in SPIRIT.

Take of rhubarb two ounces, of the lesser cardamom seeds freed from their husks half

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an

an ounce, of saffron two drams, of proof spirit a quart. Digest without heat, and strain the spirit off.

R E M A R K.

Here the liquorice of the former pharmacopæia is omitted, as insignificant, and the proportions of the remaining ingredients are somewhat varied; not only the saffron being diminished in dose, but the rhubarb also, the present quantity being thought sufficient for the intention of this medicine.

T I N C T U R A S A T U R N I N A,

The S A T U R N I N E T I N C T U R E.

Take sugar of lead, green vitriol, of each two ounces, of rectified spirit of wine a quart. Reduce the salts separately to powder, and put them into the spirit; then digest without heat, and filtre the the spirit through paper.

R E M A R K.

Many have found great perplexity in this preparation: the tincture, after it has begun to promise a good colour, unawares losing it

it again. This failure is owing to one circumstance only, the using heat; which has hitherto been directed in this tincture.

TINCTURA SENÆ,

TINCTURE of SENÆ.

Take of stoned raisins sixteen ounces, of the leaves of sena a pound, of carraway seeds an ounce and a half, of cardamom seeds husked half an ounce, of proof spirit a gallon. Digest without heat, and strain off the spirit.

REMARK.

The design of the additions here joined with the sena, are to take off from that medicine not only its nauseous flavour, but likewise its offensiveness to the stomach. And in cases, where this tincture is useful these warm seeds are a very proper means for the purpose. What directed the intention of the compilers of the *Elixer salutis* of Bate, adopted by our former pharmacopœia, for which this is substituted, is not easy to guess.

TINCTURA SERPENTARIÆ,
TINCTURE of SNAKE-ROOT.

Take of Virginia snake-root three ounces, of proof spirit a quart. Digest without heat, and strain off the spirit.

REMARK.

Upon this tincture see the Narrative of the committee, p. 85.

TINCTURA STOMACHICA,
STOMACHIC TINCTURE.

Take of stoned raisins four ounces ; of cinnamon half an ounce ; carraway seeds, the lesser cardamom seeds freed from their husks, cochineal, of each two drams, of proof spirit a quart. Digest without heat, and strain off the spirit.

REMARK.

This and the aromatic tincture are both spicy medicines, but with this difference, that the aromatic tincture is to be taken
in

In a small dose added to some vehicle;
but this in greater quantity by itself.

TINCTURA STYPTICA,

The STYPTIC TINCTURE.

Take of calcined green vitriol one dram,
of French brandy tintured by the cask a
quart. Mix them, that the spirit may
turn black, and then strain it off.

REMARK.

This is a substitute of easy preparation
for the styptic of *Helvetius*, as it is noted
by the committee in their Narrative p. 86.

TINCTURA VALERIANÆ
SIMPLEX,

The SIMPLE TINCTURE of
VALERIAN.

Take of wild valerian root four ounces,
of proof spirit a quart. After digestion strain
off the spirit.

REMARK.

In all tinctures from roots and the harder
parts of vegetables, the finer the ingredients

S 3 are

are powdered, the quicker will the tincture be drawn of its due strength; but here this circumstance is particularly necessary, the strength of the tincture depending very much upon the root's being finely pulverized.

TINCTURA VALERIANÆ
VOLATILIS,

VOLATILE TINCTURE of
VALERIAN.

Take of the root of wild valerian four ounces, of the volatile aromatic spirit a quart. Digest them together in a close vessel without heat, and then strain the tincture off.

TINCTURA VERATRI,
TINCTURE of WHITE HELLEBORE.

Take of the root of white hellebore eight ounces, of proof spirit a quart. After digestion filtre through paper.

BALSAMUM

BALSAMUM GUAICINUM,

BALSAM of GUAICUM.

Take of gum guaicum a pound, of balsam of Peru three drams, of rectified spirit of wine two pints and an half. Digest them together, that the gum may be dissolved, and then strain off the spirit.

BALSAMUM TRAUMATICUM,

VULNERARY BALSAM.

Take of benjamin three ounces, of strained storax two ounces, of balsam of Tolu one ounce, of Socotorine aloes half an ounce, rectified spirit of wine a quart. Digest them together, till as much as may be, of the gums are dissolved; then strain the spirit off.

REMARK.

Upon what model this tincture is here adjusted, see the Narrative of the committee, p. 86.

ELIXIR ALOES,

ELIXIR of ALOES.

Take of the tincture of myrrh a quart ; saffron, Scotorine aloes, of each three ounces in weight. After digestion strain off the Spirit.

ELIXIR PAREGORICUM,

THE PAREGORIC ELIXIR.

Take flowers of benjamin, opium strained, of each a dram ; of camphire two scruples ; of the essential oil of aniseeds half a dram ; of rectified spirit of wine a quart. After digestion strain off the spirit.

ELIXIR VITRIOLI ACIDUM,

ACID ELIXIR of VITRIOL.

Take of the aromatic tincture a pint, of the strong spirit, or oil of vitriol the weight of four ounces. Mix them gradually, and when the fæces are subsided, filtre through paper.

REMARK,

REMARK.

This is originally from *Mynsicht*: but in him no proportion between the spirituous tincture and the acid is specified. Our late pharmacopœia adopted the proportion set down by *Bate*; but our *London* operators thought fit to double the quantity of the vinous spirit; by which the dose of the medicine might with safety be much increased. Now the proportion between the acid, and the vinous spirit is brought back to *Bate's* prescription, and at the same time provision is made for preserving the dose, in which it has for some time past been administered: for here the same quantity of proof spirit is made use of as our operators have of late employed of rectified spirit. But the prescription of *Bate* it rendered more compendious. He transcribes *Mynsicht's* ingredients, some of which, the mint, for instance, and sage, considering the dose of the medicine, are even ridiculous.

ELIXIR VITRIOLI DULCE,
DULCIFIED ELIXIR of VITRIOL.

Take of the aromatic tincture a pint, of dulcified spirit of Vitriol eight ounces weight. Mix them.

REMARK.

This preparation is intended for stomachs which cannot bear the acidity of the preceding.

ELIXIR MYRRHÆ
COMPOSITUM,

The COMPOUND ELIXIR of MYRRH.

Take of the extract of savine one ounce, of the tincture of castor a pint, of the tincture of myrrh half a pint. After digestion strain off the tincture.

MIXTURÆ

M I X T U R Æ,

M I X T U R E S.

JULEPUM è CAMPHORA,

The CHAMPHORATED JULEP.

Take of camphire one dram, of double refined sugar half an ounce, of boiling water a pint. First grind the camphire with a little rectified spirit of wine, till it is softened; then with the sugar, till they are perfectly united; lastly add the water by degrees; and, when the mixture has stood in a covered vessel, till it is cold, strain it off.

R E M A R K.

This is a more commodious and effectual method of communicating the virtues of camphire to water, than the repeated quenchings of camphire set on fire directed by *Bate* in his dispensatory.

JULEPUM

JULEPUM à CRETA,

The CHALK JULEP.

Take of the whitest chalk prepared one ounce, of double refined sugar six drams, of gum Arabic two drams, of water a quart. Mix all together.

JULEPUM à MOSCHO

The MUSK JULEP.

Take of damask-rose water the measure of six ounces, of musk twelve grains, of double refined sugar one dram. Grind the musk and sugar together, and gradually add the rose-water.

EMULSIO COMMUNIS,

The COMMON EMULSION.

Take of sweet almonds blarched one ounce, of gum Arabic half an ounce, of double refined sugar six drams, of barley-water a quart. Dissolve the gum in the barley-water hot, and when the water is quite cold, pour it gradually upon the almonds, pounded with the sugar, rubbing them

them together, that the liquor may grow milky, then strain it off.

R E M A R K.

The method of blanching almonds is this; to put them into cold water, and then set them over a fire; as the water warms, it will soak into the skin of the almond, and render it thick and tough, till it will peel off as freely as if the almonds were fresh.

L A C A M M O N I A C I,

M I L K of G U M A M M O N I A C.

Take of gum ammoniac two drams, of simple pennyroyal water half a pint. Rub the gum in a mortar with the water, till it is dissolved.

R E M A R K.

Here the gum will dissolve sufficiently without heat; and therefore the solvent, especially as it is a distilled water, is best used cold.

S P I R I T U S

SPIRITUS VINOSUS
CAMPHORATUS,

CAMPHORATED SPIRIT of WINE.

Take of camphire two ounces, of rectified spirit a quart. Mix them that the camphire may be dissolved.

GENERAL REMARK.

None of the articles under this head, except the last, are preparations to be kept always at hand in the shops; they may be made, whenever they shall be wanted. But it is very convenient, particularly in consultations, to have some general forms of this kind already agreed upon.

SYRUP,

S Y R U P I,

S Y R U P S.

Wherever the weight of the sugar is not specified, it is to be understood, that to each pint of liquor are to be allowed twenty-nine ounces of sugar. The sugar should be double refined *, reduced to powder, and melted in the heat of a balneum, unless it be ordered otherwise, and the syrup, as soon as made, is to be set by till the next day, when any saccharine crust, that may swim on the top, is to be taken off.

R E M A R K.

The quantity of sugar should, as near as possible be so adjusted, that neither any part may shoot out again in the form of candy, which it will do when redundant; nor yet the syrup be disposed to ferment, which it will be subject to, if it be left too thin by the sugar's being deficient: and this is much the greater error.

* See the reasons assigned for this by the committee in their Narrative p. 92.

SYRUPUS

S Y R U P U S ex A L L I O,

S Y R U P of G A R L I C K.

Take of the root of garlick sliced one pound, of boiling water a quart. Steep the garlick in the water twelve hours in a close vessel, and in the liquor strained dissolve a sufficient quantity of sugar, so as to make the syrup.

S Y R U P U S ex A L T H Æ A,

S Y R U P of M A R S H - M A L L O W S.

Take of the fresh roots of marsh-mallows a pound, of double refined sugar four pound, of water one gallon. Boil the water with the roots, till it is half wasted: after it is quite cold, pour it off, and press it out: let the liquor stand by for a night, that its fæces may subside: in the morning pour off the clear, and adding the sugar boil all down to the weight of six pounds.

R E M A R K.

In this syrup the decoction being largely charged with the ingredients, the sugar will

will scarce unite uniformly with it by the heat of a balneum; and therefore it only is requisite, that the quantity of liquor be something greater in proportion to the sugar than according to the general rule above, that while the surplus is wasted by boiling, that greater heat may unite the sugar more perfectly.

This syrup taken from *Riverius*, as the committee observe in their Narrative, p. 92. is here preferred to that operose composition of *Fernelius* adopted by our former pharmacopœias.

SYRUPUS à CORTICIBUS AURANTIORUM,

SYRUP of ORANGE-PEEL.

Take of the outer yellow rind of fresh Seville orange-peel eight ounces, of boiling water five pints. Steep the peel in the water for a night in a close vessel, and in the morning dissolve in the liquors strained of double refined sugar beaten to powder, as much as is sufficient to make a syrup.

REMARK.

Here powdering the sugar is particularly requisite, that it may the sooner dis-

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solve,

solve, and the syrup not lose more than is necessary of the volatile flavour of the peel by the liquor's long continuing hot.

SYRUPUS BALSAMICUS,

SYRUP of BALSAM.

Take of balsam of Tolu eight ounces, of water three pints. Boil the balsam in the water in a circulatory vessel, or at least in a matras with a tall neck, and the orifice lightly covered, for two or three hours. When the water is cold and strained off, add double refined sugar to make it into a syrup.

REMARK.

The circulatory vessel is the most secure method to prevent the losing of the volatile parts of the balsam; but in a matras with a long neck the process succeeds not amiss, though it be but lightly stoppt. If such a matras be closed by another of a smaller neck inverted into it, and the juncture luted, it makes a circulatory vessel. Some chuse to distill the water off from the balsam; and this method is also commodious.

SYRUPUS

SYRUPUS CARYOPHYLLORUM
RUBRORUM,

SYRUP of CLOVE JULY-FLOWERS.

Take of clove july-flowers fresh, and their heels cut off, three pounds, of boiling water five pints. Steep the flowers in the water for a night in a vessel of glass, or of earth glazed: and in the liquor strained dissolve as much double refined sugar, as is required to make a syrup.

AFTER the same manner is prepared the syrup of cowslips.

REMARK.

In the syrup of clove july-flowers it is intended, that the beauty of its colour should be preserved with all care; therefore it should neither be made with too much heat, nor should the flowers be pressed.

SYRUPUS CROCI,

SYRUP of SAFFRON.

Take of saffron wine a pint, of double refined sugar twenty-five ounces; which dissolve in the wine, so as to make a syrup.

REMARK.

This syrup required the quantity of sugar to be specified, wine taking up less than water.

SYRUPUS CYDONIORUM,

SYRUP of QUINCES.

Take of the depurated juice of quinces three pints; of cinnamon one dram; cloves and ginger, of each half a dram; of red wine one pint; of double refined sugar nine pounds. Digest the juice with the aromatics six hours in a heat of ashes, then add the wine, and strain the liquor off, and lastly add the sugar to make the syrup.

SYRUPUS e SUCCO LIMONUM,

SYRUP of LEMON-JUICE.

Take of lemon-juice, after it has stood till its faeces are subsided, and it has been strained

strained off, a quart; of double refined sugar fifty ounces. Dissolve the sugar in the juice, so as to make the syrup.

AFTER the same manner are made the syrups of Mulberries, and of Raspberries.

REMARK.

These acid juices take up somewhat less sugar, than according to the general rule above laid down; and for that reason the quantity is here specified.

SYRUPUS e MECONIO,

five

DIACODION,

DIACODION.

Take of the heads of dried white poppies without their seeds three pounds and a half, of water six gallons. Slice the heads, and boil them in the water, often stirring them, that they may not burn, till about a third only of the liquor is left, which will be almost all imbibed by the poppy heads: then take all from the fire, and press the liquor strongly out from the heads: in the next place boil the liquor by itself

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to

to about two quarts, and strain it, while hot, first through a sieve and then through a thin flannel : set it by for a night, that what fæces have past the strainers, may subside ; next morning pour off the clear liquor, and boil it with six pounds of double refined sugar, till the whole comes to the weight of nine pounds, or a little more, that it may become a syrup of a just consistence.

R E M A R K.

In no syrup is it of so much consequence, that all the circumstances in the directions be exactly followed, as in this : for it is a medicine of such importance that it ought to be made, as near as possible, always to one and the same standard : as the sugar must be united to the decoction by boiling, a less quantity than according to the general rule is directed.

SYRUPUS

SYRUPUS PAPAVERIS
ERRATICI,

SYRUP of WILD POPPIES.

Take of the fresh flowers of wild poppies four pounds, of boiling water four pints and a half. Set the water poured on the flowers over the fire, and stir the flowers in till they are all thoroughly wet; and as soon as ever the flowers are sunk, let them steep for a night; next day pour off, and press out the liquor, setting it by for another night, that its fæces may subside; then with a proper addition of double refined sugar make the syrup.

R E M A R K.

The intent in setting the flowers over the fire is, that they may be a little scalded to cause them to shrink enough to be all immersed in the water; and without this artifice they can scarce all be got in: but they are no longer to be continued on the fire, than till this effect is produced, lest the liquor become too thick and the syrup rendered ropy.

SYRUPUS PECTORALIS,

PECTORAL SYRUP.

Take of the leaves of English maiden-hair dried five ounces, of liquorice four ounces, of boiling water five pints. Steep the ingredients for some hours, and when the liquor is strained off, dissolve in it a proper quantity of double refined sugar to make a syrup.

REMARK.

This syrup is designed to be of similar intention with that from the true maiden-hair of the former dispensatories; but the English maidenhair is chosen, the other being a foreign plant not commonly found here.

SYRUPUS ROSARUM

SOLUTIVUS.

SOLUTIVE SYRUP of R O S E S.

Take the decoction left after the distillation of six pounds of damask-roses, and five pounds of double refined sugar. Boil
down

down the decoction pressed out to three pints, and set it by for a night, that its fæces may subside; next morning pour off the clear liquor, and adding the sugar make it into a syrup by boiling it away, to the weight of seven pounds and a half.

SYRUPUS SCILLITICUS,

SYRUP of SQUILLS.

Take of vinegar of squills a pint and a half; cinnamon, ginger, of each an ounce; of double refined sugar three pounds and a half. Steep the spices for three days in the vinegar, and when strained, make the syrup by adding the sugar.

REMARK.

For the design in inserting this syrup, see the Narrative of the committee, p. 92.

SYRUPUS SIMPLEX,

The SIMPLE SYRUP.

Diffolve in any quantity of water the proper weight of double refined sugar to make a syrup.

REMARK.

R E M A R K.

This syrup is expedient for giving consistence to bolus's, pills, or electaries, where it is not necessary according to the formality of former times to search for one appropriated to the case, or of similar virtues to the rest of the prescription.

SYRUPUS e SPINACERVINA,

S Y R U P of B U C K T H O R N.

Take of the juice of buckthorn berries, ripe and fresh, one gallon; cinnamon, ginger, nutmeg, of each one ounce; of double refined sugar seven pounds. Set the juice by a few days, that its fæces may separate; then strain it, and in a small quantity of it infuse the spices. Boil down the rest, towards the end adding that, wherein the spices have been infused, but strained from them, that the whole may be reduced to two quarts. Then add the sugar, and make the syrup.

R E M A R K.

This juice, when thus boiled down being of itself pretty thick in consistence, the quantity of sugar is here adjusted accordingly,

ingly, that the syrup may come out of a proper body.

SYRUPUS VIOLARUM,

SYRUP of VIOLETS.

Take of violets fresh and well coloured, two pounds, of boiling water five pints. Steep the flowers a whole day in a glass, or earthen vessel glazed, then pour off the liquor, and strain it through a fine linen cloth, with caution not to press at all the flowers: afterwards with a proper quantity of double refined sugar make it into a syrup.

SYRUPUS ZINGIBERIS,

SYRUP of GINGER.

Take of ginger sliced thin four ounces, of boiling water three pints. Let the ginger steep some hours, and strain off the liquor; to which add the proper quantity of double refined sugar to make a syrup.

CON-

CONFECTIO ALKERMES,

CONFECTION of KERMES.

Take of the juice of kermes, warmed and strained three pounds, of damask-rose water six ounces in measure, of oil of cinnamon half a scruple, of double refined sugar one pound. Melt the sugar by the heat of a balneum into a syrup with the rose-water; then add the kermes juice, and after it is cold, the oil of cinnamon.

REMARK.

It is requisite, that the syrup be cold before the oil of cinnamon is added, that the heat may not dissipate that volatile aromatic oil.

MELLA

MELLA et OXYMELLITA,

HONEYs and OXYMELS.

MEL EGYPTIACUM,

EGYPTIAN HONEY.

Take of verdegriſ powdered very fine five ounces, of honey the weight of fourteen ounces, of vinegar the meaſure of ſeven ounces. Boil all together over a gentle fire, till the mixture acquire a proper conſiſtence and reddiſh colour; after a time a groſſer part will ſubſide from this mixture; the upper and more liquid part of which is called Egyptian honey.

REMARK.

The bottom of this is more acrid than the top. The top therefore is uſed alone, or with ſome of the lower part ſtirred up into it, as occaſion requires.

MEL.

MEL ELATINES.

HONEY of FLUELLIN.

Take of the depurated juice of female fluellin four pints, of clarified honey four pounds. Boil them together to a proper consistence.

MEL HELLEBORATUM,

HONEY of HELLEBORE.

Take of the roots of white hellebore dried and sliced one pound, of clarified honey three pounds, of water four pints. After steeping the roots three days in the water, boil them a little while; then boil the liquor, well pressed out and strained, with the honey to a due consistence.

REMARK.

This preparation should be more especially adjusted with care to the honey consistence; for it is a very rugged medicine, and its dose ought to be as little uncertain, as possible. The chief difference between this and the description in our former pharmacopœia, is in retrenching the
great

AND OXYMELS. 303

great redundancy of the water for the decoction.

MEL ROSACEUM,

HONEY of ROSES.

Take of red-rose buds quick dried, and their heels cut off, four ounces, of boiling water three pints, of clarified honey five pounds. Steep the roses some hours in water; then to the strained liquor add the honey, and boil to a proper consistence.

MEL SOLUTIVUM,

SOLUTIVE HONEY.

Take the decoction remaining after the distillation of six pounds of damask-roses, take also of cummin seed a little bruised an ounce, of coarse sugar four pounds, of honey two pounds. Boil the decoction pressed out to three pints, adding towards the end the seeds tied up in a cloth; then gently boil it with the sugar and honey into the consistence of a liquid honey.

OXYMEL

OXYMEL ex ALLIO,

OXYMEL with GARLICK.

Take of garlick sliced an ounce and a half; carraway seeds, sweet-fennel seeds, of each two drams; of clarified honey ten ounces; of vinegar half a pint. Boil the vinegar a little while in a glazed earthen vessel with the seeds bruised; then add the garlick, and cover the vessel; after all is cold press out the liquor, and with the heat of a balneum dissolve in it the honey.

OXYMEL SCILLITICUM,

OXYMEL of SQUILLS.

Take of clarified honey three pounds; of vinegar of squills a quart. Boil them together in a glazed earthen vessel with a gentle fire to the consistence of a syrup.

OXYMEL SIMPLEX,

SIMPLE OXYMEL.

Take of clarified honey two pounds; of vinegar a pint. Boil them in a glazed earthen

AND OXYMELS. 305

earthen vessel with a gentle fire, to the consistence of a syrup.

REMARK.

In all the Oxymels a metalline vessel must be avoided, lest it should be corroded by the vinegar.

PULVERES

U

P U L V E R E S,

P O W D E R S.

PULVIS ANTILYSSUS,

POWDER against the BITE of a MAD
D O G.

Take of ash-coloured ground-liverwort
two ounces ; of black pepper one ounce.
Beat them together into a powder.

R E M A R K.

In the former pharmacopœia the liver-
wort and pepper were prescribed in equal
quantity ; but this rendered the medicine
too hot, and therefore it has been generally
used, as here set down.

PULVIS ARI COMPOSITUS,

COMPOUND POWDER of CUCKOW-
P I N T.

Take of the root of cuckow-pint fresh
dried two ounces ; the root of the yellow
water-flag, the root of burnet saxifrage,
of

of each one ounce; prepared crabs eyes, cinnamon, of each half an ounce; of salt of wormwood two drams. Let all be beat into a powder, which must be kept in a very close vessel.

R E M A R K.

The yellow water-flag has hitherto had in this medicine the name of common or vulgar *acorus*, an appellation so little used among the botanists, that our apothecaries have in general been at a loss, what was intended by it. But as this medicine was originally the invention of a German physician, *Birchman**, under whose name it is inserted in the pharmacopœia of *Augsbourg*, so in that pharmacopœia † *acorus vulgaris* is explained to be the *acorus palustris*, which is the *gladiolus luteus* or yellow water-flag. This powder is scarce altered from that in our last pharmacopœia, except by doubling the alkaline salts, the original prescribing two alkaline salts, and one dram of each.

* See *Quercitan. pharmac. dogmaticor. restitut. p. 378.*

† In the catalogue of simples.

PULVIS e BOLO COMPOSITUS
SINE OPIO,

COMPOUND POWDER of BOLE with-
out OPIUM.

Take of bole Armenic, or of French bole
half a pound; of cinnamon four ounces;
tormentil root, gum Arabic, of each three
ounces; of long pepper half an ounce. Make
them into a powder.

PULVIS e BOLO COMPOSITUS
CUM OPIO,

COMPOUND POWDER of BOLE with
OPIUM.

Take of opium strained three drams.
Then let it be a little dried, that it may be
commodiously reduced to powder, and add
it to the species of the preceding compo-
sition, before they are pulverized, that they
may be all beat together into a powder.

R E M A R K.

With what intention this and the preced-
ing powder are here inserted, see explained
in the Narrative of the committee, p. 98.

P U L V I S

PULVIS e CERUSSA
COMPOSITUS,

COMPOUND POWDER of CERUSSE.

Take of cerusse five ounces; of sarco-
col an ounce and a half; of gum dragant
half an ounce. Make all into a powder.

R E M A R K.

This powder agrees with the troches of
cerusse in the plan of the committee, which
are a reformation of the white troches of
*Razi**; but as these are never used in the
form of troches, it has been thought most
expedient to place the composition here a-
mong the powders.

PULVIS e CHELIS.
CANCROCORUM COMPOSITUS,
COMPOUND POWDER of CRABS
CLAWS.

Take of the tips of crabs claws pre-
pared one pound; prepared pearls, red co-
ral prepared, of each three ounces. Mix
all together.

* See the Narrative of the committee, p. 101.

PULVIS BEZOARDICUS,

BEZOARDIC POWDER.

Take of the compound powder of crabs claws a pound; of oriental bezoar prepared an ounce. Make them together into a powder.

R E M A R K.

Why this powder, and the former, are made separate compositions, and for what other alterations they have now undergone, see the Narrative of the committee, p. 96, 97.

To heighten the virtues of this powder, it was originally directed to be made into balls or pellets with the jelly of vipers. But this ceremony was omitted in our last pharmacopœia.

PULVIS CONTRAYERVÆ
COMPOSITUS,COMPOUND POWDER of CON-
TRAYERVA.

Take of the compound powder of crabs claws a pound and a half; of contrayerva
root

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root five ounces. Make them into a powder.

R E M A R K.

For the alterations now made in this powder, see the Narrative of the committee, p. 97.

P U L V I S e M Y R R H A C O M P O S I T U S.

C O M P O U N D P O W D E R o f M Y R R H.

Take the dried leaves of rue, dittany of Crete, myrrh, of each an ounce and a half; asa fœtida, sagapenum, Russia castor, opopanax, of each an ounce. Beat all together into a powder.

R E M A R K.

This powder is instead of the troches under the same name, the medicine not being ever used in the other form. For what alterations are farther made, see the Narrative of the committee, p. 102.

U 4

P U L V I S

PULVIS e SCAMMONIO
COMPOSITUS,

COMPOUND POWDER of SCAMMONY.

Take of scammony four ounces, of burnt hartshorn prepared three ounces. Grind them carefully together into a powder.

R E M A R K.

This is intended to supply the place of that called the earl of *Warwick's* powder, which the college have rejected for the reasons assigned by their committee in their Narrative, p. 99.

PULVIS e SENA COMPOSITUS,

COMPOUND POWDER of SENA.

Take leaves of sena, crystals of tartar, of each two ounces; of scammony half an ounce, cloves, cinnamon, ginger, of each two drams. Powder the scammony by itself, the rest all together, and then mix them.

R E M A R K.

This is the *pulvis diasenæ* of the former pharmacopœia, with the change only
of

of ginger for galangal, and the seed of bishop's weed. Here the ginger is equal in quantity, not to both, but to one only of the other; whereby the proportion of the purgative ingredients to the whole will be something altered; but so inconsiderably, as not to require any variation in the dose of the compound.

PULVIS STERNUTATORIUS,

SNEEZING POWDER.

Take the dried leaves of asarabacca, of marjoram, of Syrian mastich-thyme, dried lavender flowers, of each equal weights; and rub all into a powder.

PULVIS e SUCCINO
COMPOSITUS,

COMPOUND POWDER of AMBAR.

Take prepared ambar, gum Arabic, of each ten drams, juice of the rape of cistus, balaustines, Japon earth, of each five drams; of olibanum half an ounce; of strained opium a dram. Reduce all into a powder.

REMARK.

R E M A R K.

This powder is no other than the troches of ambar of the plan brought hither, as being the form, in which the medicine is used. Wherein they have been changed, see the Narrative of the committee, p. 101. 102.

PULVIS e TRAGACANTHA
COMPOSITUS,

COMPOUND POWDER of GUM
DRAGANT.

Take of gum dragant, gum arabic, marsh-mallow root, of each an ounce and a half; starch, liquorice, of each half an ounce; of double refined sugar three ounces. Reduce all together into a powder.

R E M A R K.

This powder is to supply the place of the *species diatragacanthi frigidi*, and is much improved as an officinal, by changing the cold seeds which can scarce be kept any time without turning rancid, for the marsh-mallow root, which is not subject to that inconvenience.

H I E R A

HIERA PICRA,

HIERA PICRA.

Take of the gum extracted from Socotrine aloes one pound; of Winter's bark so called, three ounces; powder them separately, and then mix them.

REMARK.

The using here the gum of aloes is conformable to the original of *Andromachus* *.

SPECIES AROMATICÆ,

AROMATIC SPECIES.

Take of cinnamon two ounces; the lesser cardamom seeds freed from their husks, ginger, long pepper, of each one ounce. Make all into a powder by beating them together.

REMARK.

This powder is a reformation of the *species diambrae sine odoratis* of the former pharmacopœia: upon this the committee in their first draught observed, as follows; that the intention of this medicine is best

* See Galen. de compos. medicam. secund. loc. L. 8. c. 2.

answered by composing it of such spices, as the daily experience of the table shews to be most grateful to the stomach, and by avoiding all ingredients, which, though of the aromatic kind, are accompanied with any thing in their flavour nauseous or distasteful.

SPECIES e SCORDIO
SINE OPIO.

SPECIES of SCORDIUM or WATER GER-
MANDER, without OPIUM.

Take of bole Armenic, or of French bole four ounces; of scordium or water germander two ounces; of cinnamon an ounce and a half; storax strained, roots of tormentil, bistort, gentian, leaves of dittany of Crete, galbanum strained, gum Arabic, red roses of each one ounce; long pepper, ginger, of each half an ounce. Beat all into a powder.

SPECIES e SCORDIO
CUM OPIO,

SPECIES of SCORDIUM or WATER
GERMANDER, with OPIUM.

Take of strained opium three drams, and add this to the former species, while they

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they are pounding together, it being first a little dried, that it may the more commodiously be beaten to powder.

R E M A R K.

This composition is usually called the species of *Fracaſtorius's* confection, or of *diaſcordium*, of which he was the inventor. But as the ingredients are here ſomewhat altered from his, it were an impropriety to continue his name. The reaſons for theſe alterations, ſee in the Narrative of the committee, p. 64, 65.

T R O C H I S C I

TROCHISCI et TABELLÆ,

TROCHES and LOZENGES.

SACCHARUM ROSACEUM,

SUGAR of ROSES.

Take of red rose-buds, quick dried, and their white heels cut off, one ounce; of double refined sugar a pound. Reduce the roses and sugar to powder separately; then mix them, and with a little water form lozenges to be dried with a gentle heat.

REMARK.

The method of operation directed in our former pharmacopœias, and others, is to mix the roses with sugar melted over the fire; but an easier manner of composition is here prescribed.

TROCHISCI BECHICI ALBI,

WHITE PECTORAL TROCHES.

Take of double refined sugar a pound and a half, of starch an ounce and a half,
of

TROCHES, AND LOZENGES. 319

of liquorice six drams, of Florentine orris half an ounce. All the ingredients being reduced to powder, with the mucilage of gum dragant form troches.

REMARK.

These scarce differ from the same composition in the former pharmacopœia, except in omitting the ceremony of dissolving the gum dragant in rose-water.

TROCHISCI BECHICI NIGRI,

BLACK PECTORAL TROCHES.

Take extract of liquorice, double refined sugar, of each ten ounces ; of gum dragant half a pound. By moistening with water make troches.

REMARK.

These are more simple, than those in our last pharmacopœia, and the mistake, there made, of inserting the powder of liquorice instead of the extract, is here corrected.

TROCHISCI e NITRO,

TROCHES of NITRE.

Take of purified nitre four ounces, of double refined sugar a pound. Make them into troches with the mucilage of gum dragant.

TROCHISCI e SCILLA,

TROCHES of SQUILLS.

Take of baked squills half a pound, of wheat flower four ounces. Pound them together, and form them into troches to be dried with a small heat.

R E M A R K.

These troches are here continued on account of the *theriaca Andromachi*, or Venice treacle. The committee in their first draught expressed themselves relating to them after this manner: “ The *trochisci e* “ *scillâ* for the *theriaca* are retained, because it is intended to continue the ancient “ form of using baked squills; and the making them up after baking into troches with “ flower seems to be the most convenient “ way

AND LOZENGES. 321

“ way of drying them : we have directed
“ common wheat flower, that being most
“ at hand, and as fit for the purpose as any
“ other.”

TROCHISCI e SULPHURE,

TROCHES of SULPHUR.

Take of washed flowers of sulphur two ounces, of double refined sugar four ounces. Beat them together, and by gradually adding the mucilage of quince-seeds form troches.

TROCHISCI e TERRA
JAPONICA,

TROCHES of JAPON EARTH.

Take Japon earth, and gum Arabic, of each two ounces ; of sugar of roses sixteen ounces. Beat them together, and with a little water make troches.

REMARK.

Here, instead of gum dragant, is now used gum Arabic a substance more easily dissolvable than the other.

TABELLÆ CARDIALGICÆ,
CARDIALGIC LOZENGES.

Take of prepared chalk four ounces, of prepared crabs claws two ounces, of bole Armenic, or French bole, half an ounce, of nutmeg a scruple, of double refined sugar three ounces. Make all into a powder, and then with a little water form it into lozenges.

R E M A R K.

This composition is altered from the form proposed by the committee in respect to two ingredients, essential oil of nutmegs, and gum Arabic: the first of these is changed for the spice itself, upon experience that the medicine became thus more agreeable to the stomach; and as there is no use in having these troches of slow dissolution, the gum is intirely omitted.

PILULÆ,

P I L U L Æ,

P I L L S.

PILULÆ AROMATICÆ,

AROMATIC PILLS.

Take of Socotorine aloes an ounce and a half; of gum guaiacum an ounce; the aromatic species, balsam of Peru, of each half an ounce. Let the aloes, and gum guaiacum be powdered separately, then mixt with the rest, and formed into a mass with the syrup of orange peel.

REMARK.

These pills are formed upon the model of those called in our former pharmacopœia *pilulæ diambrae*; they are also not dissimilar in intention to those called *alephanginae*, or, as the word has been corruptly written, *aloephanginae*, with which also they correspond in their name: for *pilulæ alephanginae* both in the *Lumen apothecariorum*, and in the *Luminare majus* are interpreted aromatic pills.

PILULÆ ex COLLOCYNTHIDE
SIMPLICIORES,

The MORE SIMPLE PILLS of COLO-
QUINTIDA.

Take the pith of colocuintida, scam-
mony, of each two ounces; of oil of cloves
two drams. Let the dry species be reduced
to powder separately, the oil be mixt with
them, and the whole be formed into a mass
with syrup of buckthorn.

R E M A R K.

These are no other than the *pilulæ ex
duobus*, or pills of two ingredients, so styled
of the former pharmacopœias.

PILULÆ ex COLOCYNTHIDE
cum ALOË,

PILLS of COLOQUINTIDA with
ALOES.

Take Socotorine aloes and scammony,
of each two ounces; of the pith of colo-
quintida one ounce; of oil of cloves two
drams. Let the dry species be reduced to
4 powder

powder separately, the oil mixt among them, and the whole formed into a mass with syrup of buckthorn.

R E M A R K.

These pills are instead of those commonly called *coccia*. For the change in the name and what else relates to them, see the Narrative of the committee, p. 102 103.

P I L U L Æ E C P H R A C T I C Æ,

D E O B S T R U E N T P I L L S.

Take of the aromatic pill three ounces ; rhubarb, extract of gentian, salt of iron, of each one ounce ; of salt of wormwood half an ounce. With the solutive syrup of roses beat them diligently into a mass.

R E M A R K.

Here the aromatic pill supplies the place both of the gum guaiacum, and the pill called *aloephangina* in our former pharmacopœia.

P I L U L Æ G U M M O S Æ,

G U M P I L L S.

Take galbanum, opopanax, myrrh, sagapenum, of each an ounce ; of asa fœtida

X 3

half

half an ounce. With the syrup of saffron make them into a mass.

REMARK.

Upon these see the Narrative of the committee, p. 104, 105.

PILULÆ MERCURIALES,

MERCURIAL PILLS.

Take of quicksilver five drams, of Strasbourg turpentine two drams, of the cathartic extract four scruples, of rhubarb in powder one dram. First grind the quicksilver with the turpentine, till it appear no longer; then beat them up with the rest into a mass. If the turpentine chance to be too thick, it is to be thinned with a little oil olive.

PILULÆ RUFI,

RUFUS'S PILLS.

Take of Socotorine aloes two ounces; myrrh, and saffron, of each one ounce. Make them into a mass with syrup of saffron.

REMARK.

REMARK.

These pills we have from an Arabian author *: A Greek writer † ascribes to Rufus a draught wherein is used gum ammoniac in equal quantity with the aloes instead of the saffron in this pill, and the same intention ascribed to this as the Arabian attributes to the pills. But as the Arabian ascribes these also to Rufus, they are here kept under his name. These pills in the preceding pharmacopœia are directed to be made up with syrup of wormwood, a syrup not retained here, and prejudicial to the colour, which is the marketable recommendation of this composition.

PILULÆ SAPONICÆ,

SOAP PILLS.

Take of almond soap four ounces, of strained opium half an ounce, of essence of lemons a dram. Beat the opium softened with a little wine along with the rest, till they are perfectly mixt.

* See the Narrative of the committee, p. 104.

† Eginet. L. II. c. 36.

R E M A R K.

The essence of lemons very successfully takes off the disagreeable flavour of the soap. For the design in inserting this pill see the Narrative of the committee, p. 106.

PILULÆ e STYRACE,

S T O R A X P I L L S.

Take of strained storax two ounces, of saffron one ounce, of strained opium five drams. Beat them diligently together, till they are perfectly mixed.

R E M A R K.

If the dryness of any of the materials should make it requisite, the opium may be softened with a little wine; but in general that is not necessary: the saffron, when in good condition, being soft enough to beat into a mass with the rest without any such help.

E L E C T A R I A,

E L E C T A R I E S.

R E M A R K.

The term *electarium* has of late been most generally written *electuarium*; but here is chosen the orthography of *Celius Aurelianus*, the most ancient author, we have, who uses the word,

ELECTARIUM e BACCIS LAURI,

ELECTARY of BAY BERRIES.

Take the leaves of rue dried, carraway seeds, common parsley seeds, bay-berries, of each an ounce; of sagapenum half an ounce; black pepper, Russia castor, of each two drams; of clarified honey thrice the weight of the species, when powdered. Mix the species with the honey into an electary.

R E M A R K.

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REMARK.

This is greatly contracted from the form of the preceding pharmacopœias *.

ELECTARIUM e CASIA,

ELECTARY of CASIA.

Take the solutive syrup of roses, the pulp of casia fresh extracted, of each half a pound; of manna two ounces; of the pulp of tamarinds one ounce. Rub the manna in a mortar, and with a small heat dissolve it in the syrup, then add the pulps, and the heat being continued reduce the whole to a proper consistence.

REMARK.

This electary is here contracted by omitting the decoction of prunes and violets. The solutive syrup of roses is also substituted for the syrup of violets, as being in present practice a more common ingredient in purgative medicines.

* See the Narrative of the committee, p. III.

ELECTARIUM LENITIVUM,

LENITIVE ELECTARY.

Take of dried figs one pound; of the leaves of fena eight ounces; the pulps of tamarinds, of casia, and of French prunes, of each half a pound; of coriander seed four ounces; of liquorice three ounces; of double refined sugar two pounds and a half. Reduce the fena with the coriander seed to powder, and separate by the sieve ten ounces; boil the rest with the figs and liquorice in two quarts of water, till it is boiled half away; then strain and press it out; let the strained liquor be evaporated to the weight of a pound and a half, or a little less; afterwards add the sugar to make a syrup; this syrup mix gradually with the pulps; and lastly stir in the powder before separated by the sieve.

REMARK.

In this composition many trifling ingredients, with which it was before charged; are now omitted. By putting here the whole of the fena into the mortar together, the quantity required in powder is the
sooner

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sooner obtained, the tender parts of the leaves being reduced quicker into powder than the stalks and hard fibres. But these are as useful in the decoction, as any part, it having been found by certain experience that they purge as effectually, and as free from disagreeable symptoms, as the finer part of the leaves. The coriander seeds are directed to be pulverized along with the fena, because they are not so easily reduced to powder by themselves.

ELECTARIUM e SCAMMONIO,

ELECTARY of SCAMONY.

Take of scammony an ounce and a half; cloves, ginger, of each six drams; of the essential oil of carraway seeds half a dram; of honey half a pound. Reduce the scammony to powder by itself; mix the aromatics, first pounded together, with the honey; then add the scammony, and in the last place the oil.

R E M A R K.

This being intended as a substitute for the *caryocostinum* of our former pharmacopœia, the observation of the committee in their Narrative, p. 111. ought carefully
to

ELECTARIES. 333

to be attended to, that a dram and a half of this contains as much scammony, as half an ounce of the *caryocostinum*. This was so adjusted, that the medicine might be more easily taken.

ELECTARIUM e SCORDIO,

ELECTARY of SCORDIUM
or WATER-GERMANDER.

Take any quantity of the species of scordium or water-germander with opium, and thrice their weight of diacodium boiled to the thickness of honey. Mix the species with the syrup into an electary.

REMARK.

This electary is but little varied from the common diascordium; wherein, see the Narrative of the committee, p. 97, 98.

BALSAMUM LOCATELLI,

LOCATELLI'S BALSAM.

Take of oil olive a pint; Strasburg turpentine, yellow wax, of each half a pound; of red sanders six drams. Melt the

the wax with some part of the oil over a gentle fire, then add the rest of the oil, and the turpentine; in the last place mix in the sanders, and stir the whole well together, till it is nearly cold.

CONFECTIO CARDIACA,

The C O R D I A L C O N F E C T I O N.

Take fresh rosemary tops, juniper berries, of each a pound; the lesser cardamom seeds freed from their husks, zedoary, saffron, of each half a pound. Draw a tincture with about a gallon and a half of proof spirit; reduce by a gentle heat this tincture strained nearly to the weight of two pounds and a half; then finish the electary by adding the following species very finely powdered; viz. of the compound powder of crabs claws sixteen ounces; cinnamon, nutmeg, of each two ounces; of cloves an ounce; of double refined sugar two pounds.

R E M A R K.

This is a substitute for the operose Raleigh's confection or cordial, upon which

see the Narrative of the committee, p. 111, &c. The dry species to be added may require the extract to be left of somewhat a greater weight than two pound and an half; but if it be dried away any thing too much, it is easily moistened again.

CONFECTIO PAULINA,

The CONFECTION called PAULINA.

Take costus, or in its stead zedoary, cinnamon, long pepper, black pepper, strained storax, strained galbanum, strained opium, Russia castor, of each two ounces; of the simple syrup boiled to the consistence of honey, an equal weight to thrice the species. Mix carefully the opium first dissolved in wine with the syrup warmed; then to the storax and galbanum melted together add by degrees the syrup, while it remains warm; afterwards sprinkle in the other species reduced to powder.

REMARK.

See the observations of the committee upon this electary in their Narrative, p. 115.

The circumstance directed here, and in the following electaries, of dissolving the opium

336 ELECTARIES.

opium in wine is designed for greater security, that the opium be perfectly distributed in a uniform manner throughout the composition.

MITHRIDATIUM, five CONFECTIO DAMOCRATIS; MITHRIDATE, or DAMOCRATES'S CONFECTION.

Take of cinnamon fourteen drams; of myrrh eleven drams; agaric, spikenard, ginger, saffron, seeds of treacle mustard or of mithridate mustard, frankincense, Chio turpentine, of each ten drams; camel's hay, costus, or in its stead zedoary, Indian leaf, or in its stead mace, French lavender, long pepper, seeds of hartwort, juice of the rape of cistus, strained storax, opopanax, strained galbanum, balsam of Gilead, or in its stead expressed oil of nutmegs, Russia castor, of each an ounce; poley mountain, water-germander, the fruit of the balsam-tree, or in its stead cubebs, white pepper, seeds of the carrot of Crete, bdellium strained, of each seven drams; Celtic nard, gentian root, leaves of dittany,
of

of Crete, red roses, seeds of Macedonian parsley, the lesser cardamom seeds freed from their husks, sweet fennel seeds, gum Arabic, opium strained, of each five drams; root of the sweet flag, root of wild valerian, anise-seed, sagapenum strained, of each three drams; spignel, St. John's wort, juice of acaëia, or in its stead Japon earth, the bellies of scinks, of each two drams and a half; of clarified honey thrice the weight of all the rest. Dissolve the opium first in a little wine, and then mix it with the honey made hot; in the mean time melt together in another vessel the galbanum, storax, turpentine, and the balsam of Gilead, or the expressed oil of nutmeg, continually stirring them round, that they may not burn; and as soon as these are melted, add to them the hot honey, first by spoonfuls, and afterwards more freely: lastly, when this mixture is near cold, add by degrees the rest of the species reduced to powder.

REMARK.

This composition is usually made in such quantities that it is difficult to avoid a sensible

Y fible

338 ELECTARIES.

sible waste in powdering the species; but care ought to be used to lose as little as may be, that the dose of the opium may not be rendered too uncertain. The weight of the honey must be adjusted to the species after powdering.

PHILONIUM LONDINENSE,

The LONDON PHILONIUM.

Take white pepper, ginger, carraway seeds of each two ounces; of opium strained six drams; of diacodion boiled to the consistence of honey, thrice the weight of all the rest. Mix carefully the opium, dissolved first in wine, with the syrup warmed, and then add the other species reduced to powder.

REMARK.

Notwithstanding the great reformation the committee had made in this composition, the college has here still farther contracted it*.

* See the Narrative of the committee, p. 115, 116.

THERIACA ANDROMACHI,

VENICE TREACLE.

Take of the troches of squills half a pound; long pepper, opium strained, dried vipers, of each three ounces; cinnamon, balsam of Gilead, or in its stead expressed oil of nutmeg, of each two ounces; agaric, the root of Florentine orrice, water germander, red roses, seeds of navel, extract of liquorice, of each an ounce and a half; spikenard, saffron, amomum, myrrh, costus, or in its stead zedoary, camel's hay, of each an ounce; the root of cinquefoil, rhubarb, ginger, Indian leaf, or in its stead mace, leaves of dittany of Crete, of horehound, and of calamint, French lavender, black pepper, seeds of Macedonian parsley, olibanum, Chio turpentine, root of wild valerian, of each six drams; gentian root, Celtic nard, spignel, leaves of poley mountain, of St. John's wort, of ground pine, tops of creeping germander with the seed, the fruit of the balsam tree, or in its stead cubebs, anise seed, sweet fennel seed, the lesser cardamom seeds freed

from their husks, seed of bishop's weed, of hartwort, of treacle mustard or mithridate mustard, juice of the rape of cistus, acacia, or in its stead Japon earth, gum Arabic, storax strained, sagapenum strained, Lemnian earth, or in its stead bole Armenic or French bole, green vitriol calcined, of each half an ounce; root of creeping birthwort, or in its stead of the long birthwort, tops of the lesser centaury, seeds of the carrot of Crete, opopanax, galbanum strained, Russia castor, Jew's pitch, or in its stead white ambar prepared, root of the sweet flag, of each two drams; of clarified honey thrice the weight of all the rest. The ingredients are to be mixed in the same manner as in the mithridate.

R E M A R K.

Here the same cautions in relation to the powdering of the species are to be observed as in the mithridate. Very little alteration has been attempted in either of these celebrated antidotes. But for what small variation has been made, see the Narrative of the committee, p. 117, &c. to which may be added, that wild valerian is
here

here received upon the judgment of *Fabius Columna*; and *rhabarbarum*, rhubarb, is inserted instead of *rhaponticum* after the example of the dispensatory of *Augsburg*, the *rhapontic* not being used with us otherwise in medicine.

NOTE.

All electaries, if they grow dry, should be reduced again to their consistence with a small quantity of Canary, and not with syrup, or honey: by this means the dose will be rendered the least uncertain; which is especially necessary in those, that are made up with syrup, and contain a large quantity of opium, such as the *philonium*, and the confection bearing the name of *Paulina*.

REMARK.

The reason for this caution is that the quantity of the fresh syrup, or honey will be so great, as to vary the proportion of the whole to the original ingredients, and make the effect of the medicine precarious.

AQUÆ MEDICAMENTOSÆ,
MEDICATED WATERS.

AQUA ALUMINOSA BATEANA,
BATE'S ALUM WATER.

Take alum, white vitriol, of each half an ounce ; of water a quart. Dissolve the salts by boiling them in the water, and, when the fæces have subsided, filtre the liquor through paper.

R E M A R K.

Bate prescribes the alum and the vitriol, to be burnt together; but this is here omitted, as an unnecessary circumstance. And this change in the direction is so little that the medicine may very properly still retain his name for distinguishing it from the alum water of the late pharmacopœia, which, though now omitted, as not much in use, yet this distinction is by no means unnecessary, considering the mischief, which may arise from a mistake herein.

AQUA

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AQUA SAPPHIRINA,

The SAPPHIRE COLOURED WATER.

Take of lime-water a pint, of sal ammoniac one dram. Let them stand together in a copper vessel, or with a few bits of copper, till the water has acquired a blue sapphire colour.

AQUA VITRIOLICA CÆRULEA,

The BLUE VITRIOLIC WATER.

Take of blue vitriol three ounces; alum, the strong spirit or oil of vitriol, each two ounces; of water a pint and a half. Boil the salts in the water, till they are dissolved; then add the oil of vitriol, and strain the mixture through paper.

REMARK.

This is formed upon the styptic recommended by *Sydenham* in hemorrhages of the nose. But the quantity of alum is lessened, that being the salt, which forms those crystals, which in *Sydenham's* prescription are directed to be thrown away. The phlegm of vitriol also is changed for common water.

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The reasons for not continuing *Sydenham's* name to this medicine, see in the Narrative of the committee p. 121, 122.

AQUA VITRIOLICA CAMPHORATA, CAMPHORATED VITRIOLIC WATER.

Take of white vitriol half an ounce ; of camphire two drams ; of boiling water a quart. Mix them, that the vitriol may be dissolved ; and, after the fæces have subsided, filtre the water through paper.

REMARK.

Upon this see the Narrative of the committee, p. 121.

LOTIO SAPONACEA, The SAPONACEOUS LOTION.

Take of damask-rose water three quarters of a pint ; of oil olive a quarter of a pint ; of the ley of tartar the measure of half an ounce. Rub the ley of tartar and oil together, till they are mixed ; then gradually add the water.

OLEA

OLEA per **INFUSIONEM**,
et

DECOCTIONEM;

OILS by **INFUSION**, and **DE-**
COCTION.

OLEUM HYPERICI,

OIL of **St. JOHN'S WORT.**

Take of the flowers of St. John's wort full blown, fresh, and carefully picked from their calyxes four ounces; of oil olive a quart. The oil being poured on the flowers, let them stand together till the oil is sufficiently tinged,

OLEUM e MUCILAGINIBUS,

OIL of **MUCILAGES.**

Take of the root of marsh mallows fresh half a pound; linseed, fenugreek seeds, of each three ounces; of water a quart; of oil olive two quarts. Boil gently the roots and seeds bruised in the water for half an hour; afterwards

346 OILS BY INFUSION.

afterwards add the oil, and renew the boiling, till the water is quite wasted; then pour the oil cautiously off.

OLEUM SAMBUCINUM,

OIL of ELDER.

Take of elder flowers one pound; of oil olive a quart. Boil the flowers in the oil, till they are almost crisp; then press out the oil and set it by, that the fæces may subside.

OLEUM VIRIDE,

GREEN OIL.

Take bay-leaves, leaves of rue, of marjoram, of sea wormwood, and of chamomile, of each three ounces; of oil olive a quart. The herbs being bruised boil them lightly in the oil, till they are become crisp; then press out the oil; and after the fæces have subsided pour it off.

EMPLASTRA,

E M P L A S T R A,

P L A S T E R S.

EMPLASTRUM ex AMMONIACO

cum

MERCURIO,

The AMMONIAC PLASTER

with QUICKSILVER.

Take of gum ammoniac strained a pound; of quicksilver three ounces; of the simple balsam of sulphur a dram. Rub the quicksilver with the balsam of sulphur; till it no longer appear; then add by degrees the gum ammoniac melted, a little before it is cold, and mix them carefully.

EMPLASTRUM ATTRAHENS,

DRAWING PLASTER.

Take yellow rosin, yellow wax, of each three pounds; of tried mutton sewet one pound. Melt all together, and strain the mixture while it remains fluid.

REMARK.

This is intended to supply the place of the well known melilote plaster. See hereupon the Narrative of the committee, p. 122; 123.

EMPLASTRUM CEPHALICUM,

CEPHALIC. PLASTER.

Take of Burgundy pitch two pounds; of soft labdanum, one pound; yellow rosin, yellow wax, of each four ounces; of that called the expressed oil of mace one ounce. The pitch, rosin, and wax being melted together, add first the labdanum, and then the oil of mace.

REMARK.

See upon this the Narrative of the committee, p. 123, 124.

EMPLASTRUM COMMUNE,

The COMMON PLASTER.

Take of oil olive one gallon; of litharge finely powdered five pounds. Boil them

them together with about a quart of water over a gentle fire, continually stirring till the oil and litharge are united, and they acquire the due consistence of a plaster; and if the water is wasted, before the operation is over more water must be poured on hot.

R E M A R K.

The water is necessary to moderate the heat, and prevent the oil from burning and growing black. When a subsequent addition during the operation is to be made, it should be put in boiling hot, lest it suddenly expand, and blow the hot plaster about.

This plaster is to supply the place of the diachylon plaster of our former pharmacopœias. Why the committee adopted this less compound form, they explained in their first draught; *viz.* because the plaster under the name of diachylon has been thus prepared, in our shops, for so long a time, that no objection can be made from experience against it.

E M P L A S -

EMPLASTRUM COMMUNE
ADHÆSIVUM,

The COMMON STICKING
PLASTER.

Take of the common plaster three pounds; of yellow rosin half a pound. Throw the rosin, first reduced to powder, that it may the sooner melt, into the common plaster melted with a very gentle heat, and stir them well together.

O T H E R W I S E.

While the oil and litharge are boiling together, add the rosin a little before the plaster is finished, and then boil all together to the proper consistence.

EMPLASTRUM COMMUNE
CUM GUMMI,

The COMMON PLASTER with GUMS.

Take of the common plaster three pounds; of galbanum strained eight ounces; common turpentine, frankincense, of each
three

three ounces. To the galbanum and turpentine melted together with a gentle heat, sprinkle in the frankinsence reduced to powder; and then gradually add to them the plaster first melted likewise with a very gentle heat.

O T H E R W I S E.

Instead of the common plaster finished, make use of the oil boiled with litharge, as soon as they are joined, and not yet brought to the consistence of a plaster.

R E M A R K.

This is substituted for the *emplastrum diachylon cum gummi*; the *diachylon magnum*, from which that was composed, being observed by the committee in their first draught to be a composition above measure absurd: in it were employed two oils prepared by a triple infusion, one oil by infusion and decoction, and no less than six mucilages, without any sensible addition to the efficacy of the medicine.

EMPLA-

EMPLASTRUM COMMUNE,
CUM MERCURIO,

The COMMON PLASTER with QUICK-
SILVER.

Take of the common plaster one pound ;
of quicksilver three ounces, of the simple
balsam of sulphur a dram. Mix them to-
gether after the same manner, as in the
ammoniac plaster with quicksilver.

EMPLASTRUM e CYMINO,

The CUMMIN PLASTER.

Take of Burgundy pitch three pounds ;
yellow wax, cummin seeds, carraway seeds,
bay berries, of each three ounces. The
pitch and wax being melted together,
sprinkle into them the rest reduced to
powder, and stir all well together.

REMARK,

According to the remark of the com-
mittee in their Narrative p. 124. the car-
raway seeds are here added to give the
plaster a more agreeable smell, and with
this

this addition the boiling of the Burgundy pitch prescribed in the late pharmacopœia is useless, the only real purpose answered by it being to thicken the pitch. But this plaster wanted some farther assistance to preserve its rolls from falling flat in warm weather; which all plasters composed of rosins and turpentine are subject to, however firm they feel in handling. Wax is the proper ingredient for this purpose, which for that reason is here added.

EMPLASTRUM e MINIO,

RED-LEAD PLASTER.

Take of oil olive two quarts, of red lead finely powdered two pounds and a half. With these the plaster is to be prepared in the same manner, as the common plaster; only here more water is required, and more caution, that the plaster may not be burnt, and turn black.

EMPLASTRUM e
MUCILAGINIBUS,

P L A S T E R of M U C I L A G E S.

Take of yellow wax forty ounces, of the oil of mucilages eight ounces in measure, of gum ammoniac strained half a pound, of common turpentine two ounces. The gum ammoniac being melted with the turpentine, add to them gradually the wax melted with the oil in another vessel.

EMPLASTRUM ROBORANS,
S T R E N G T H N I N G P L A S T E R.

Take of the common plaster two pounds; of frankincense half a pound, of dragons blood three ounces. To the common plaster melted add the rest reduced to powder.

EMPLASTRUM e SAPONE,
S O A P P L A S T E R.

Take of the common plaster three pounds; of hard soap half a pound. To the common plaster liquified add the soap, then melt all to the consistence of a plaster, and take particular

particular care, that it does not grow too cold, before it is formed into rolls.

R E M A R K.

There is some care required for forming this plaster into rolls. When in cooling it first begins to lose its fluidity, and receive the consistence of a paste, it may easily be rolled; but if this is not then immediately done, the mass, though it still retain a good degree of softness, loses its tenacity, and will break to pieces: for this reason it ought to be stirred while it cools, that the surface may not chill too much, before the under parts are come to a due consistence; but that the whole may, as much as may be, retain a uniform degree of warmth.

EMPLASTRUM
STOMACHICUM,
STOMACH PLASTER.

Take of soft labdanum three ounces; of frankincense one ounce; cinnamon, expressed oil of mace, so called, of each half an ounce; of essential oil of mint one dram. Add to the frankincense melted, first the labdanum a little heated, till it is become soft, and then the oil of mace; afterwards mix in the

AT 1200 Z 2 cinnamon

cinnamon with the oil of mint, and beat them together in a warm mortar into a mass, which is to be kept in a vessel well closed.

R E M A R K.

Whoever attends to the unreasonable profuseness in the composition of the plaster, which in the former pharmacopœia goes under this name, will plainly see the reason for rejecting it. The principles, upon which this is composed in its room, the committee have explained in their Narrative p. 124, 125. It is only requisite to add here, that the ingredients will very readily form into a plaster, provided the labdanum be any thing pure.

E M P L A S T R U M
V E S I C A T O R I U M,

B L I S T E R I N G P L A S T E R.

Take of the drawing plaster two pounds; of cantharides one pound; of vinegar half a pint. The plaster being melted a little before it hardens, sprinkle in, and mix the cantharides reduced to a very fine powder; then add the vinegar, and beat all well together.

U N G U E N T A,

U N G U E N T A,

et

L I N I M E N T A ;

OINTMENTS and LINIMENTS.

UNGUENTUM SIMPLEX,

The SIMPLE OINTMENT.

Take of tried hog's lard two pounds, of rose water three ounces. Pound the lard with the rose water, till they are well mixt, then melt the lard with a very gentle fire, and set it by a little while that the water may subside; afterwards pour out the lard, and leave the water; then stir and beat the lard without ceasing while it is growing cold, that it may be broke into as light and yielding a mass as may be; and then add as much essence of lemons, as shall be requisite to give it an agreeable scent.

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R E M A R K.

This is a substitute for the *pomatum* of the former pharmacopœias in compliance with almost immemorial custom.

U N G U E N T U M A L B U M,

W H I T E O I N T M E N T.

Take of oil olive one pint, of white wax four ounces, of sperma ceti three ounces. Melt all together with a gentle heat, and stir them very briskly without ceasing, till they are fully cold.

R E M A R K.

Here besides neglecting the formality of oil of roses, the cerusse is omitted, this unguent being often used to the frettings of the skin in young children; and application of this corroded lead to such tender bodies is not unaccompanied with danger.

UNGUENTUM ALBUM
CAMPHORATUM,

CAMPHORATED WHITE OINTMENT.

This is made by adding to the former a dram and a half of camphire, first beat with a few drops of oil of almonds.

UNGUENTUM ex ALTHÆA,

OINTMENT of MARSH-MALLOWS.

Take of the oil of mucilages three pints, of yellow wax one pound, of yellow rosin half a pound, of common turpentine two ounces. Melt the rosin and wax with the oil; then, these being taken off the fire, add the turpentine and strain the mixture, while it is hot.

REMARK.

Here the oil of mucilages prepared with oil olive, is preferred to the neat's foot oil of the former pharmacopœia, which has a very offensive smell.

UNGUENTUM BASILICUM
FLAVUM,

YELLOW BASILICUM,

Take of oil olive a pint; yellow wax, yellow rosin, Burgundy pitch, of each a pound; of common turpentine three ounces. Melt the wax, rosin and pitch, with the oil over a gentle fire; then take them off, add the turpentine, and strain the mixture, while it remains hot.

R E M A R K.

Here oil olive is now preferred to linseed oil; whereby the composition will keep longer free from rancidness.

UNGUENTUM BASILICUM
NIGRUM,

vel

TETRAPHARMACUM;

BLACK BASILICUM.

Take of oil olive a pint; yellow wax, yellow rosin, common pitch, of each nine ounces.

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ounces. Melt all together, and strain the mixture off, while hot.

UNGUENTUM BASILICUM VIRIDE,

GREEN BASILICUM.

Take of yellow basilicum eight ounces in weight, of oil olive three ounces in measure, of prepared verdegris one ounce. Mix all into an ointment.

UNGUENTUM CÆRULEUM FORTIUS.

The STRONGER BLUE OINTMENT.

Take of tried hog's lard two pounds, of quicksilver one pound, of the simple balsam of sulphur half an ounce. Rub the quicksilver with the balsam of sulphur, till the quicksilver no longer appears: then add by degrees the lard warmed, and diligently mix them.

U N -

UNGUENTUM CÆRULEUM
MITIUS,

The WEAKER BLUE OINTMENT.

Take of tried hog's lard four pounds, of quicksilver one pound, of common turpentine an ounce. Rub the quicksilver in a mortar with the turpentine, till the quicksilver appears no longer; then add by degrees the lard warmed, and mix them diligently.

REMARK.

This is the mercurial unguent of the former pharmacopœia; the other is taken from the usage of some of our hospitals. In that balsam of sulphur is used instead of the turpentine employed in this; the quicksilver being by the balsam much sooner divided.

UNGUENTUM e GUMMI
ELEMI,

OINTMENT of GUM ELEMI.

Take of tried mutton sewet fresh two pounds, of gum elemi one pound, of com-
mon

AND LINIMENTS. 363

mon turpentine ten ounces. Melt the gum with the sewet, and all being removed from the fire add forthwith the turpentine, and, while the mixture is fluid, strain it.

UNGUENTUM e MERCURIO PRÆCIPITATO,

OINTMENT with PRECIPITATE
of MERCURY.

Take of the simple ointment an ounce and a half, of precipitated sulphur two drams, of white precipitate of mercury two scruples. Mix all together, and moisten them with the ley of tartar to bring the whole to the consistence of an ointment.

UNGUENTUM e PICE,

OINTMENT of TAR.

Take of tar, and of dried mutton sewet equal weights. Melt them together, and strain, while hot.

UN-

UNGUENTUM SAMBUCINUM,

O I N T M E N T of E L D E R.

Take of elder flowers full blown four pounds, of tried mutton sewet three pounds, of oil olive one pound. Boil the flowers, till they become almost crisp, in the sewet and oil, first melted together, then press them out.

R E M A R K.

The flowers are now substituted for the parts of the elder before employed; these making a much more elegant ointment.

UNGUENTUM SATURNI-
N I N U M,

L E A D O I N T M E N T.

Take of oil olive half a pint, of white wax an ounce and a half, of sugar of lead two drams. Rub the sugar of lead, first brought to a very subtle powder, with
some

AND LINIMENTS. 365

some part of the oil, then add this to the wax melted with the rest of the oil, and stir the mixture till it is fully cold.

UNGUENTUM e SULPHURE,

OINTMENT of SULPHUR.

Take of the simple ointment half a pound, of flowers of sulphur unwashed two ounces, of essence of lemons a scruple. Mix all together.

UNGUENTUM TRIPHARMACUM,

OINTMENT of THREE INGREDIENTS.

Take of the common plaster four ounces in weight, of oil olive two ounces in measure, of vinegar one ounce in measure. Set them together over a gentle fire, continually stirring them till they are brought to the consistence of an ointment.

REMARK.

This ointment is of the same import, as that otherwise called *unguentum nutritum*; but prepared more easily than by the method in that unguent of rubbing gradually the materials together.

U N-

UNGUENTUM TUTIÆ,

OINTEMNT of TUTTY.

Take any quantity of prepared tutty, and mix with it as much purified vipers fat, as is requisite to bring it to the consistence of a soft ointment.

UNGUENTUM ad VESICATORIA,

OINTMENT for BLISTERS.

Take of tried hogs lard, and of the blistering plaster equal weights. Melt them together with a very gentle heat, and stir them well till fully cold.

UNGUENTUM VIRIDE,

GREEN OINTMENT.

Take of the green oil three pounds, of yellow wax ten ounces. Melt the wax
with

AND LINIMENTS. 367

with the oil over a gentle fire, continually stirring till the mixture is cold.

LINIMENTUM ALBUM,

WHITE LINIMENT.

Take of oil olive three ounces in measure, of sperma ceti the weight of six drams, of white wax two drams. Melt all together with a gentle fire, briskly stirring without intermission, till the mixture is become quite cold.

REMARK.

This Liniment differs from the ointment of the same name only by such a variation in the proportions of the ingredients, as to render the composition softer.

LINIMENTUM SAPONACEUM,

SAPONACEOUS LINIMENT.

Take of the spirit of rosemary a pint, of hard Spanish soap three ounces, of camphire one ounce. Digest the soap with the spirit

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spirit of rosemary, till it is dissolved ; then add the camphire.

R E M A R K.

This is intended, as a commodious form of the liniment, whose basis is proposed by *Riverius* *, and at present in use under the name of *opodeldoc*, one of the phantastical terms of Paracelsus's coining, though given by him to a plaster consisting of gums, and therefore nothing resembling the composition of this.

L I N I M E N T U M T R I P H A R - M A C U M,

L I N I M M N T O F T H R E E I N G R E - D I E N T S.

Take of common plaster four ounces in weight, of oil olive four ounces in measure, of vinegar the measure of one ounce. Set them over a gentle fire continually stirring till the liniment has acquired its due consistence.

* *Prax. L. XVI. c. 2.*

R E M A R K.

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REMARK.

This differs only in consistence from the unguent of the same appellation.

LINIMENTUM VOLATILE, VOLATILE LINIMENT,

Take of oil of almonds one ounce in measure, of the spirit of sal ammoniac the weight of two drachms. Shake them together in a wide-mouthed vial, till they perfectly unite.

REMARK.

The spirit of sal ammoniac here prescribed is intended to be that prepared with an alkaline salt, which is described before in this book, and not what is made with lime.

A a CERA.

C E R A T A,

C E R A T E S.

CERATUM ALBUM.

WHITE CERATE.

Take of oil olive four ounces in measure, of white wax four ounces in weight, of sperma ceti half an ounce in weight. Mix all together, and stir them well, till the cerate is quite cold.

REMARK.

This differs from the white ointment and liniment only in consistence, as the following does from the yellow basilicum.

CERATUM CITRINUM,

YELLOW CERATE.

Take of yellow basilicum half a pound, of yellow wax an ounce. Melt them together.

CERATUM

CERATUM EPULOTICUM,

CICATRIZING CERATE.

Take of oil olive a pound; yellow wax, prepared calamy, of each half a pound. Melt the wax with the oil, and, as soon as the mixture begins to congeal, sprinkle in the calamy, and stir all well, till the cerate is quite cold.

CERATUM MERCURIALE,

MERCURIAL CERATE.

Take yellow wax, tried hog's lard of each half a pound; of quicksilver three ounces; of the simple balsam of sulphur a dram. Melt the wax with the lard; then add them gradually to the quicksilver, first well divided by the balsam of sulphur.

E P I T H E M A T A,

E P I T H E M S.

E P I T H E M A V E S I C A T O R I U M,

B L I S T E R I N G E P I T H E M.

Take of cantharides reduced to a very fine powder, and of wheat flower equal weights. With a sufficient quantity of vinegar make them into a paste.

R E M A R K.

This in our former pharmacopœia was improperly placed among the unguents.

E P I T H E M A V O L A T I L E,

V O L A T I L E E P I T H E M.

Take equal weights of common turpentine, and of spirit of sal ammoniac. Stir the turpentine in a mortar, and gradually drop in the spirit, till the whole is reduced to a white mass.

R E M A R K.

REMARK.

See upon this the observations of the committee in their Narrative p. 124.

The spirit of sal ammoniac here used must be that before described in ahis book, prepared with an alkaline salt.

CATAPLASMA e CYMINO,

CUMMIN CATAPLASM.

Take of cummin seeds half a pound; bay berries, the leaves of water germander dried, Virginia snake root, of each three ounces; of cloves one ounce; with honey equal to thrice the weight of the species powdered make a cataplasm.

REMARK.

This is a substitute for the *thereica Londinensis*, which however introduced at first, that we might not be without our peculiar *thereica*, after the example of other public pharmacopœias, has long become an external application only, where the most fanciful can scarce conceive any pretence for so large a composition. Upon what principles this contraction is made,

see in the Narrative of the committee
p. 120.

CATAPLASMA MATURANS,
SUPPURATING CATAPLASM.

Take of dried figs four ounces ; of yellow basilicum one ounce ; of strained galbanum half an ounce. Beat well the figs with a little wine, or strong stale beer ; then carefully mix in the ointment first melted with the galbanum.

COAGULUM ALUMINOSUM,
ALUM CURD.

Take of the white of an egg at pleasure, and stir it in a pewter vessel with a sufficient lump of alum, till it is coagulated.

R E M A R K.

This is described from *Riverius* [*Prax. L. II. c. 8.*] However there is nothing so essential in the choice of the vessel, but that any kind will equally serve, which cannot be suspected of giving a taint to the preparation.

A N

I N D E X

Of the names of medicines changed.

Because many medicines have now new names given them, though the medicines themselves, or at least their virtues, are not altered; that no uncertainty may arise from hence, it has been thought expedient to give here a list of these medicines.

The former names.

The new names.

<i>Antimonium dia-</i>	}	{	<i>Calx antimonii</i> ; The
<i>phoreticum</i>			
<i>Aqua benedicta</i>	}	{	<i>Aqua calcis minus com-</i>
<i>composita Ba-</i>			
<i>teana</i>			
<i>Aqua Hungarica</i>	}	{	<i>Spiritus rorismarini</i> ;
<i>Bateana</i>			
<i>Aqua styptica Sy-</i>	}	{	<i>Aqua vitriolica cæru-</i>
<i>denhami</i>			
<i>Arcanum coralli-</i>	}	{	<i>Mercurius corallinus</i> ;
<i>num</i>			

A a 4

Aurum

<i>Aurum mosaicum</i>	{	<i>Aurum musivum</i> ; Mo- saic gold.
<i>Balsamum poly- chrestum</i>	{ }	<i>Balsamum guaiacinum</i> ; Balsam of guaia- cum.
<i>Calomelas</i>	{	<i>Mercurius dulcis sexies sublimatus</i> ; Dulcified mercury sublimate six times sublimed.
<i>Confectio Archige- nis</i>	{ }	<i>Confectio Paulina</i> ; The confection call- ed Paulina.
<i>Confectio Raleigh- ana</i>	{ }	<i>Confectio cardiaca</i> ; The cordial con- fection.
<i>Crocus metallorum</i>	{	<i>Crocus antimonii</i> ; Cro- cus of antimony.
<i>Diacasia cum man- nâ</i>	{ }	<i>Electarium e casia</i> ; Electary of casia.
<i>Diascordium</i>	{	<i>Electarium e scordio</i> ; Electary of scordi- um.
<i>Elixir asthmaticum</i>	{	<i>Elixir paregoricum</i> ; Paregoric elixir.
<i>Elixir proprietatis Helmontii</i>	{ }	<i>Vinum aloeticum alka- linum</i> ; Aloetic al- kaline wine.
<i>Elixir proprietatis simplex</i>	{ }	<i>Elixir aloes</i> ; Elixir of aloes.

Elixir

<i>Elixir salutis</i>	{	<i>Tinctura senæ</i> ; Tinc- ture of sena.
<i>Elixir vitrioli</i> <i>Minfichti</i>	{ }	<i>Elixir vitrioli aci- dum</i> ; Acid elixir of vitriol.
<i>Elixir vitrioli Vi- gani</i>	{ }	<i>Elixir vitrioli dulce</i> ; Dulcified elixir of vitriol.
<i>Emplastrum dia- chylon simplex</i>	{ }	<i>Emplastrum commu- ne</i> ; The common plaster.
<i>Emplastrum diachy- lon cum gum- mi</i>	{ }	<i>Emplastrum commu- ne cum gummi</i> ; The common pla- ster with gums.
<i>Emplastrum epi- spasticum</i>	{ }	<i>Emplastrum vesica- torium</i> ; Blistering plaster.
<i>Emplastrum e meli- loto</i>	{ }	<i>Emplastrum attra- hens</i> ; Drawing plaster.
<i>Ens veneris</i>	{	<i>Flores martiales</i> ; Martial flowers.
<i>Gas sulphuris</i>	{	<i>Aqua sulphurata</i> ; Sulphurated water.
<i>Julepum campho- raturum</i>	{ }	<i>Julepum e camphora</i> ; The camphorated Julep.
<i>Julepum cretaceum</i>	{ }	<i>Julepum e creta</i> ; The chalk Julep. <i>Julepum</i>

<i>Julepum moschatum</i>	} {	<i>Julepum e moscho</i> ; The musk Julep.
<i>Lac sulphuris</i>	} {	<i>Sulphur præcipitaum</i> ; Precipitated Sulphur.
<i>Lapis contrayervæ</i>	} {	<i>Pulvis contrayervæ compositus</i> ; Compound powder of contrayerva.
<i>Laudanum liquidum Sydenhami</i>	} {	<i>Tinctura Thebaica</i> ; Thebaic tincture.
<i>Linimentum Arcæi</i>	} {	<i>Unguentum e gummi elemi</i> ; Ointment of gum elemi.
<i>Linimentum opodeldoc</i>	} {	<i>Linimentum saponaceum</i> ; Saponaceous liniment.
<i>Mercurius præcipitatus per se</i>	} {	<i>Mercurius calcinatus</i> ; Calcined quicksilver.
<i>Mercurius præcipitatus ruber</i>	} {	<i>Mercurius Corrosivus ruber</i> ; The mercurial red corrosive.
<i>Oleum antimonii</i>	} {	<i>Causticum antimoniale</i> ; The antimonial caustic.
<i>Oleum sulphuris per campanam</i>	} {	<i>Spiritus sulphuris per campanam</i> ; Spirit of sulphur by the bell.

Oleum

<i>Oleum tartari per deliquium</i>	{	<i>Lixivium tartari</i> ; Ley of tartar.
<i>Oleum vitrioli</i>	{	<i>Spiritus vitrioli fortis</i> ; The strong spirit of vitriol.
<i>Pasta epispastica</i>	{	<i>Epithema vesicatorium</i> ; Blistering epithem.
<i>Philonium Romanum</i>	{	<i>Philonium Londinense</i> ; The London Philonium.
<i>Pilulæ coccicæ minores</i>	{	<i>Pilulæ ex colocynthide cum aloe</i> ; Pills of coloquintida with aloes.
<i>Pilulæ diambrae</i>	{	<i>Pilulæ aromaticæ</i> ; Aromatic pills.
<i>Pilulæ e duobus</i>	{	<i>Pilulæ ex colocynthide simpliciores</i> ; The more simple pills of coloquintida.
<i>Pilulæ Rudii</i>	{	<i>Extractum catharticum</i> ; The cathartic extract.
<i>Pulvis cephalicus</i>	{	<i>Pulvis sternutatorius</i> ; Sneezing powder.
<i>Pulvis comitis Warwicensis</i>	{	<i>Pulvis e scammonio compositus</i> ; Compound powder of scammony.

Pulvis

<i>Pulvis diasenæ</i>	{	<i>Pulves e senâ compositus</i> ; Compound powder of sena.
<i>Saccharum rosatum</i>	{	<i>Saccharum rosaceum</i> ; Sugar of roses.
<i>Species confectionis Fracastorii</i>	{	<i>Species e scordio cum opio</i> ; Species of scordium, or water-germander, with opium.
<i>Species diambrae sine odoratis</i>	{	<i>Species aromaticæ</i> ; Aromatic species.
<i>Species diatrageanthi frigidae</i>	{	<i>Pulvis e tragacanthâ compositus</i> ; Compound powder of gum dragant.
<i>Species hieræ picrae</i>	{	<i>Hiera Picra</i> ; Hiera picra.
<i>Spiritus vini camphoratus</i>	{	<i>Spiritus vinosus camphoratus</i> ; Camphorated spirit of wine.
<i>Spiritus vitrioli</i>	{	<i>Spiritus vitrioli tenuis</i> ; The weak spirit of vitriol.
<i>Spiritus volatilis oleosus</i>	{	<i>Spiritus volatilis aromaticus</i> ; Aromatic volatile spirit.
<i>Sulphur auratum antimonii</i>	{	<i>Sulphur antimonii præcipitatum</i> ; Precipitated sulphur of antimony.

Syrupus

- Syrupus capillorum* } *Syrupus pectoralis* ;
veneris } Pectoral syrup.
Theriaca Londi- } *Cataplasma e cymi-*
nensis } no; Cummin cata-
plasm.
Tinctura anti- } *Tinctura saturnina* ;
phthisica } The saturnine tinc-
ture.
Tinctura croci vino } *Vinum croceum* ; Saf-
canarino } fron wine.
Tinctura hellebori } *Tinctura melampodii* ;
Tincture of black
hellebore.
Tinctura Helveti- } *Tinctura styptica* ; The
styptic tincture.
Tinctura hieræ } *Tinctura sacra* ; Tinc-
tura sacra.
Tinctura specierum } *Tinctura aromatica* ;
diambræ sine o- } Aromatic tincture.
doratis
Trochisci albi Raxis } *Pulvis e cerussâ com-*
positus ; Compound
powder of cerusse.
Trochisci e carabe } *Pulvis e succino com-*
positus ; Compound
powder of ambar.
Trochisci e myrrhâ } *Pulvis e myrrhâ com-*
positus ; Compound
powder of myrrh.
Turpethum

<i>Turpethum mine- rale</i>	{	<i>Mercurius emeticus fla- vus</i> ; The yellow mercurial emetic.
<i>Vinum benedictum</i>	{	<i>Vinum antimoniale</i> ; Antimonial wine.
<i>Unguentum dial- thææ</i>	{	<i>Unguentum ex althæâ</i> ; Ointment of marsh- mallows.
<i>Unguentum marti- atum</i>	{	<i>Unguentum viride</i> ; The green oint- ment.
<i>Unguentum nutri- tum</i>	{	<i>Unguentum triphar- macum</i> ; ointment of three ingredients.
<i>Unguentum poma- tum</i>	{	<i>Unguentum simplex</i> : The simple oint- ment.

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A

T A B L E

For computing the doses of compound purgatives, opiates, and mercurials.

<i>Pulvis e bolo compositus cum opio,</i> The compound powder of bole with opium	}	in gr. 45 contains of opium gr. 1.
<i>Pulvis e scammonio compositus,</i> The compound powder of scammony	}	in gr. 7 contains of scammony gr. 4.
<i>Pulvis e senâ compositus,</i> The compound powder of sena	}	in gr. 21 contains { sena gr. 8. of { crystals of tar- tar gr. 8. scammony gr. 2.
<i>Pulvis e succino compositus,</i> The compound powder of ambar	}	in gr. 40 contains of opium gr. 1.

Species

<i>Electarium e scordio,</i> The electary of scordium or water-germander	} in ʒiij contains of opium gr. i.
<i>Confectio paulina,</i> The confection called paulina	} in gr. 32 contains of opium gr. i.
<i>Mithridatium, five</i> <i>confectio Damocratis,</i> Mithridate or Damocrates's confection	} in ʒss contains of opium gr. i.
<i>Philonium Londinense</i> The London Philonium	} in gr. 75 contains of opium gr. i.
<i>Theriaca Andromachi</i> Venice Treacle	} in gr. 75 contains of opium gr. i.
<i>Emplastrum ex ammoniaco cum mercurio,</i> The ammoniac plaster with quicksilver	} contains of quicksilver about $\frac{1}{2}$ of the whole.
<i>Emplastrum commune cum mercurio,</i> The common plaster with quicksilver	} contains of quicksilver nearly $\frac{1}{2}$ of the whole.
<i>Unguentum cæruleum fortius,</i> The stronger blue ointment	} contains of quicksilver nearly $\frac{1}{2}$ of the whole.

Unguentum

Unguentum cæruleum
mitius,
The weaker blue
ointment } contains of quickfil-
ver nearly $\frac{1}{2}$ of the
whole.

Ceratum mercuriale,
The mercurial cerate } contains of quickfil-
ver nearly $\frac{1}{3}$ of the
whole,

F I N I S.